

40722/A

Digitized by the Internet Archive in 2015







PHARMACOPOEIA CHIRURGICA:

OR, FORMULÆ FOR

THE USE OF SURGEONS:

INCLUDING,

AMONG A VARIETY OF REMEDIES EMPLOYED
IN THE PRIVATE PRACTICE OF THE MOST
EMINENT OF THE PROFESSION,

ALL THE

PRINCIPAL FORMULÆ

OF THE DIFFERENT HOSPITALS.

THE FIFTH EDITION, Corrected and enlarged.

LONDON,

PRINTED BY THE PHILANTHROPIC SOCIETY,
St. George's-Fields,
For G. and J. Robinson, Paternoster-Row.

1802.



TO

THE SURGEONS

OF

THE UNITED KINGDOM OF GREAT BRITAIN

AND

IRELAND,

THIS FIFTH AND RECENTLY
IMPROVED EDITION

OF A

PHARMACOPOEIA,

EXPRESSLY CALCULATED
FOR THEIR INFORMATION AND
CONVENIENCE,
IS MOST GRATEFULLY
DEDICATED,
BY THEIR OBLIGED AND VERY
HUMBLE SERVANT,
THE AUTHOR.

DETERMINE TO A

SECTION IN COLUMN

-1-10-10 m

The second of the second

AND THE PROPERTY OF THE

tyre V to a king of the contract of the contra

430 5 4 1 2 TZ

ADVERTISEMENT.

PREFIXED TO THE FIRST EDITION.

T is a fact of which every medical man must be aware, that, in the Pharmacopoeias already extant, a very inconsiderable number of formulæ are included for the particular use of surgeons, and many of these happen to be such as are not wholly entitled to approbation. It may indeed be very reasonably disputed, whether the learned bodies who have, for a series of years, sent forth their instructions on this subject, be actually competent to the task of directing what remedies are adapted to the practice of a branch of the healing art with which they profess to have no acquaintance whatever; and they would perhaps have done well, had they acknowledged this incompetency, by leaving entirely out of their new editions, the few topical remedies that are at present included in them. The design of the following pages, is to supply the deficiencies alluded to, and to furnish the chirurgical practitioner, with a complete collection of those formulæ, which, in the course of his professional occupations, he must necessarily have occasion to employ.

Since the publication of the Theory of Chirurgical Pharmacy, a work, at this time, in a great measure, obsolete, and disgraced also with receipts for cosmetics and other ridiculous compositions, nothing of this kind has been attempted. The practice of the different Hospitals, has indeed been exhibited in a later publication, but the known inaccuracy of that work, the unscientific way in which the subject is handled, and the very few chirurgical remedies included in it, afford the practitioner a very scanty share of information. In the present work, particular care has been taken to admit only such formulæ as are applicable to surgery, and, of those, none but really useful and efficacious remedies. Where this rule is

disregarded at least, it is only on the authority of some eminent practitioner, whose partiality to a particular remedy, has been grounded on a long experience of its good effects, and whose name furnishes a sort of sanction for its introduction.

In the nomenclature, as strict an attention is paid as the case would admit, to the plan very properly pursued by the London College; but, in some few cases, as the reader will readily perceive, it has been found impracticable.

Since the practice of surgery unavoidably embraces many of the remedies of the physician, it has been found necessary to pay a degree of attention also to them; but this is done to no farther an extent, than the customs of medical surgery may be supposed to warrant. To all the formulæ directly taken from the College Dispensatory, a distinguishing mark (L) has been affixed. The more operose of these, as the chemical preparations, &c. are merely named, and their uses, in a concise way, pointed out. The more pharmaceutical compositions, as the collyria, liniments, unguents, &c. are detailed, and their mode of application spoken of.

Mastly, it may be proper to observe, that CHESELDEN'S Short Essay towards a Pharmacopoeia Chirurgica, annexed to Le Dran's Operations, furnished the general hint for the present

publication.

PREFACE

TO THE

FIFTH EDITION.

The favourable reception which the public have given the preceding editions of this work, whilst it flatters the author's feelings, has had the more important effect of quickening his diligence to provide a remedy for its defects, and to enlarge its boundaries by the addition of new and (he trusts it will be found) useful matter.

In the remarks affixed to the formulæ heretofore published, many practical observations have been blended; whilst a number of original formulæ, collected from foreign sources, or communicated to the author by practitioners of eminence, have been introduced in the alphabetical arrangement.

On the whole, it is hoped, that not only the young, but even the experienced surgeon, will find, in the following sheets, matter worthy of his regard; no endeavours having been spared to render the work complete, not only in its leading character of a chirurgical Pharmacopoeia, but also in that of a summary of the practice of medical surgery, which indeed formed no immaterial part of the original design.

In order that reference may be had with greater facility to any particular remedy, and indeed that the whole may be brought more comprehensively to the reader's observation, a Table of Formulæ is annexed to the present edition.

المراجع والأسام والملك ومراجع والمراس

PHARMACOPOEIA CHIRURGICA.

ACETUM.

VINEGAR is an article by no means unworthy of being classed amongst our chirurgical remedies. Independent of its convenience and efficacy when joined with farinaceous substances and applied as a cataplasm to sprained joints, as will be noticed in its proper place, it forms an eligible lotion for inflammation of the skin, when mixed with alcohol and water, in about equal proportions.

At the Gloucester Infirmary, it has been found of service in quickening the exfoliation of carious bone; an effect, which, in all likelihood, is owing to its known property of dissolving

the earthy part of bone.

Mr. Cleghorn, a brewer in Edinburgh, has communicated some accounts of its excellent effects when immediately applied to burns and scalds. A persevering application of it in

these cases, assuages the violent smarting, and is of service notwithstanding exceriation or loss of substance. At a proper period after the accident, he applies powdered chalk in a sufficient quantity to absorb the discharge, and covers the part with a common poultice. Mr. Cleghorn's ideas were communicated to the late Mr. Hunter, and by him recorded in the second volume of Medical Facts and Observations in the following terms: "Mr. Cleghorn," says he, "recommends the immediate application of vinegar, which is to be continued for some hours, by any the most convenient means, until the pain abates. Should it return, the vinegar is to be repeated: if the burn is so severe as to have destroyed any part, when the pain has ceased it is to be covered with a poultice, which remains six, or at most eight hours; when removed, the part is to be entirely covered with very finely powdered chalk, until every moist appearance upon the surface of the sore has disappeared, when it is again to be covered with the poultice. The same mode is then to be pursued every night and morning until the cure is compleat. If the use of poultices appears to relax the wounds too much, they are to be covered with a plaster or ointment made with white lead, but the chalk is still to be used next the wound.

In respect to general remedies, he says, "I

allow my patients to eat boiled or roasted fowl, or in short, any plain-dressed meat they like; and I do not object to their taking (with moderation, however) wine, water and spirits, ale, or porter. My applications, as hath been already observed, allay pain and inflammation, and also always either prevent or remove feverishness; and at the same time (if one may judge from their effects) they have powerful antiseptic virtues: I have never had occasion to order bark or any internal medicines whatever, and I have only once thought it necessary to let blood. When a patient is costive, I order boiled potbarley and prunes, or some other laxative nourishing food, and sometimes an injection, but never any purgatives. It is distressing to a patient with bad sores to be often going to stool. Besides, I have remarked that weakness and languor (which never, in my opinion, hasten the cure of any sore) are always brought on, more or less, by purgatives. From the effects too, I have felt them have upon myself, and observed them to have upon others, they do not seem to me to have so much tendency to remove heat and feverishness, as is generally imagined; and I suspect that, contrary to the intention of administering of them, they oftener carry off useful humours than hurtful ones."

Mr. Cleghorn found vitriolic acid, diluted,

by no means a good substitute for the acetous; on the contrary, it was attended with bad effects, but still he found it necessary to use vinegar that was "fresh" and "lively" to the taste.

These observations of Mr. Cleghorn are become particularly interesting since the proposal of Mr. Kentish to treat burns upon a new principle, and the latter has ingeniously applied Mr. Cleghorn's facts to his own indisputable theory on that subject, by attributing the good effects of sharp vinegar to the stimulant property of the alcohol contained in it. Nor does Mr. Kentish fail to avail himself of the following practical points, which not only apply to this but also to the constitutional treatment. " Even the common vinegar, only by being used too cold," says Mr. Cleghorn, "affected two of my patients with tremblings and chillness, which alarmed me a good deal. I removed these symptoms indeed (as I before mentioned) very readily, by warming the patients' feet with cloths dipped in warm water, and giving them warm water and spirits to drink; but, ever since, I have been careful to use precautions against the like symptoms, particularly in cold weather, by warming the vinegar a little, placing the patients near the fire, giving them something warm internally, and, in short, by keeping them in every respect in a comfortable condition." See LINIMENTUM TEREBINTHINE.

The acid of vinegar, procured in a concentrated state, by repeatedly freezing the water in which it is diffused, and taking out the ice, is a very useful application in hemorrhages.

ACIDUM NITROSUM.

This acid has lately been tried by Dr. Rollo and Mr. Cruikshank, of the Royal Artillery, Dr. Beddoes, Mr. Blair, and a multitude of other medical men, as a substitute for quicksilver in the cure of the Lues Venerea; and, it must be confessed, with a degree of success that is, to say the least, highly encouraging.

The practice indeed originated with Mr. Wm. Scott, a surgeon at Bengal; and, it is said, he caught the idea from Dr. Girtanner, who had in his writings suggested, that the beneficial effects in syphilus, of the various preparations of quicksilver, arose from the oxygen contained in them.

Although a discovery of such eventual importance could not but claim a place in these pages, it is no part of our business to decide between the testimonies adduced for and against its universal adoption. Suffice it therefore to say, that a multitude of cases have been brought in favour of nitric acid as an antisyphilitic, and also some which seem very decidedly to controvert its claim to that character.

"The acid of nitre is obtained in various degrees of oxygenation. When the proportion of oxygen to that of azot is less than three of the former to one of the latter, it is termed nitrous acid, and in this state, fumes of a red colour are very freely emitted; but when there are four parts of oxygen, by weight, combined with one of azot, the acid is colourless, emits no vapour, and then takes the appellation of nitric acid." It is, in fact, the nitrous acid surcharged with oxygen; a circumstance very material to be attended to by those who undertake experiments with this acid, notwithstanding the assertions of a late writer on the subject, that in some successful trials, only the " common fuming acid of the shops" was used.

The usual commencing dose of the nitric acid is drach. j, which is mixed with a pint of distilled water, sweetened sufficiently with simple syrup, and taken down, at different times in the course of twenty-four hours, through a small glass tube, which is used to prevent the teeth from being injured. If no inconvenience is felt by the patient, the quantity is increased to drach. iss. drach, ij. and even, in certain cases, to drach. iij.

The remarkable effects of the acid are commonly

those of increasing the appetite and augmenting the secretion of urine; causing also more or less thirst, a white tongue, sizy blood, and increased action of the whole system; but nothing like mercurial salivation takes place. It does not, however, accommodate itself equally well to all constitutions.

This remedy is said to be no less adapted for the cure of primary than secondary venereal symptoms, but the degree of success, in the cases which have hitherto appeared, seems greatly on the side of the former. This indeed may be the fact without any disparagement of the acid as a remedy for true venereal affections; since we know how inefficaceous, and even mischievous quicksilver sometimes is, when administered in the like cases. The nitric acid is said to act sensibly on the disease in six or eight days, and frequently to effect a cure in fifteen or sixteen.

There are other substances which contain oxygen, and which are thought to be no less capable of curing syphilis than nitric acid. The principal and most approved of these, is the oxygenuted muriate of pot ash, which Mr. Cruikshank considers even more efficacious than nitric acid, since, in one instance, it succeeded when the latter had little or no effect.

ÆRUGO.

Prepared verdigris is an excellent application to shankers. In their early state, its action on them as a caustic, will frequently interrupt the progress of a venereal infection completely. Yet it is not safe perhaps, in any case, to rely solely upon this treatment, or to omit the use of quicksilver either internally or by frictions.

ÆRUGO CUM CALOMELANE.

R Æruginis præparatæ Calomelanos sing. drach. j misce.

This is calculated for the same purposes as the foregoing; but its action being less considerable, it may be applied to shankers every day, or every other day. The state of ill-conditioned ulcers may also be improved by slightly sprinkling them occasionally with this powder.

ALCOHOL CARYOPHYLLATUM.

R Alcoholis drach iij
Olei caryophylli drach. j misce.

This solution of oil of cloves in alcohol, has been applied upon lint, to carious bones, to quicken the process of exfoliation.

ALUMEN.

Alum, either in its simple state or deprived of its water of crystallization by fire, has been long an article of the materia medica. Unless for external use, in a dry powder, its properties however are not improved by burning. Ten grains of alum, formed into a bolus with conserve of roses, are given three times a day at Guy's Hospital, in such cases as demand the exercise of powerful tonic or astringent remedies.

In a relaxed state of the urinary passages, or want of power in the sphincter vesicæ, the exhibition of alum in small doses has proved useful.

In those cases also where the poison of lead is to be counteracted, Dr. Percival recommends, its use.

Burnt alum, applied to fungous excrescences, acts as a mild caustic. Joined with Colcothar of Vitriol (Pharm. Edin.) in the proportion of three parts of the former to one of the latter, it is employed at Guy's Hospital as a styptic, to restrain hemorrhages, &c.

ANTIMONIUM MURIATUM. (L)

As a caustic, this remedy has been long used under the name of butter of antimony, for destroying warts and excrescences.

AQUA ARSENICATA.

R Arsenici in pulverem triti unc. ss. Aquæ distillatæ lib. j.

These are to be boiled together in a flask till one-fourth of the liquor is evaporated, and, when cold, filter the remainder through paper by means of a glass funnel.

Dr. Way, of Wilmington, recommends this as a good remedy for foul ulcers and cutaneous eruptions, but whether the free use of such a topic be free from danger to patient, is worthy of consideration.

Dr. Martin, a late American physician, employed this also for the cure of cancers; and when applied to those in the occult state, he removed the cuticle by the previous application of cantharides.

AQUA CUPRI VITRIOLATI CAMPHO-RATA.

R. Cupri vitriolati
Boli Gallici sing. unc. ss.
Camphoræ drach. j
Aquæ ferventis lib. iv.

The boiling water is to be added to the other ingredients, and the liquor filtered when cold.

This is the aqua camphorata of Bates, and is chiefly employed in a diluted state, as a collyrium; but it may also prove of service as an application to foul ulcers.

AQUA KALI. (L)

No adequate trial of this as an external application to ulcers or herpetic eruptions has yet been made; but, that it may at least be rendered eminently useful as an internal medicine, there can be no doubt.

Mr. Hunter relates the case of a gentleman who had sores on the preputium very much resembling "mild chancres." They were unaltered by the internal use of mercury and irritated by its use as a topic, and, after continuing five months, appear to have been cured by this Lixivium, given in a dose of forty drops night and morning, in a bason of broth.

AQUA KALI PURI. (L)
R Kali lib. iv
Calcis lib. vj
Aquæ distillatæ cong. iv.

Four pints of water, being added to the lime, are to be allowed to stand for one hour; after which, the kali and the rest of the water are to be joined. The mixture is then to be boiled

for a quarter of an hour, and when cold, the clear liquor strained off.

This is the *lixivium saponarium* of the old Dispensatory. It has been thought capable of dissolving urinary calculi, and with this view has been given in considerable doses, and for a length of time, in several instances. These trials, however, have not proved so successful as could have been wished, nor is the exhibition of so active a remedy unattended with disadvantageous consequences to the system; for which reason, under the name of *mephitic alkaline water*, vegetable alkali supersaturated with fixed air, has of late been substituted in nephritic complaints, and is very strongly recommended by Dr. Percival and other writers.

Dr. Saunders, in his Formulæ Selectæ, directs a mixture of Aqua kali and Aqua calcis in the proportion of half an ounce of the former to six ounces and a half of the latter. The dose ordered is one large spoonful twice a day.

AQUA LITHARGYRI ACETATI. (L)

R Lithargyri lib. ij unc. iv Aceti distillati cong. j.

These are to be boiled together, keeping the mixture constantly stirred, till only six pounds of liquid remain.

This preparation of lead is in too general use to need any particular remark. It is seldom if ever employed in surgery, in an undiluted state. The late Mr. Justamond, however, and Dr. Cheston of Gloucester, used to apply it mixed with an equal proportion of a spirit resembling the tinctura ferri muriati, to the edges of cancerous sores.

It is to be feared, this remedy has, in a number of cases, promoted the views of surgery at the expence of the patient's general health; the absorption of lead into the system, having, as is well known, a very pernicious tendency, and inducing diseases, which, Dr. Fordyce asserts, go on notwithstanding the cause is removed, and in the end prove fatal.

On this account, many practitioners have given up the use of this remedy, and have had recourse to solutions of vitriolated zinc, which, it is said, answer equally well; but it is now rendered probable, from the experiments of Mr. Baynton, of Bristol, that cold water alone is of as much service as either in removing inflammation.

ARGENTUM NITRATUM. (L)

This is the mildest of the caustics used in surgery. Its utility as an occasional application to ulcers, is well known.

Mr. Hunter recommends its use on the first appearance of a shanker, and before the surrounding parts can be supposed to have partaken of venereal contamination. He directs the caustic to be scraped to a point, like a black lead pencil, so that when it is applied, every part of the surface of the shanker may come in contact with it; and he advises the repetition of this process, till the last slough which is thrown off, leaves the sore florid and healthy, like the granulations of a simple ulcer. From this treatment, there is a chance, that the constitution will not be infected; but it is nevertheless consistent with prudence, to exhibit quicksilver in some way or other, at the same time.

One thing, however, relative to the use of this and other similar applications, ought to be noticed by way of caution; namely, that the glans penis in some, particularly in scrofulous patients, is liable to slough, and that very largely, on the application even of slight caustics. An instance is known to several in this metropolis, of a gentleman who underwent this kind of treatment, under the bands of a practitioner of considerable reputation, with the loss of half his penis. In habits of this description, it is not uncommon even for a shanker to slough spontaneously. Where there is a great degree

of inflammation in the shanker itself, as well as in the surrounding parts, great circumspection is certainly necessary in the first use of this remedy.

Mr. Hunter also very ingeniously employed this caustic in the cure of strictures in the urethra. His original method was, to pass it down through a metal canula till it came in contact with the diseased part, but as that was found liable to great objections, he afterwards adopted, and since his death, his relation, Mr. Everard Home, has successfully practiced, the following improvement.

" Take a bougie, of a size that can be readily passed to the stricture, and insert a small piece of lunar caustic into the end of it, letting the caustic be even with the surface, but surrounded every where laterally by the substance of the bougie. This should be done some little time before it is required to be used; for the materials of which the bougie is composed, become warm and soft by being handled, in inserting the caustic; and therefore the hold the bougie has of the caustic is rendered more secure, after it has been allowed to cool and harden. This bougie so prepared, is to be oiled and made ready for use; but, previous to passing it, a common bougie of the same size is to be introduced down to the stricture, to clear the canal,

and to measure exactly the distance of the stricture from the external orifice; this distance being marked upon the armed bougie, it is to be passed down to the stricture, immediately upon the other being withdrawn. In its passage, the caustic is scarcely allowed to come in contact with any part of the membrane, the point of the bougie, of which it forms the central part, always moving in the middle line of the canal; and indeed the quickness with which it is conveyed to the stricture, prevents any injury to the membrane, where it is accidentally brought to oppose it. In this mode the caustic is passed down with little or no irritation to the lining of the urethra; it is applied in the most advantageous manner to the stricture, and can be retained in that situation the necessary time to produce its effects."

The alledged advantages of this treatment are, that it produces a permanent cure, which the bougie does not, that the pain consequent on its application is inconsiderable, and that neither irritation nor inflammation are found to supervene. One inconvenience, however, may, and now and then does occur, which is, that the caustic destroys more than is intended, and the urine afterwards forcing off the sloughs somewhat prematurely, a very copious hemorrhage

from the exposed cells of the corpus spongiosum urethræ is the consequence.

A solution of nitrated silver in nitrous acid is a good application to warts on the fingers which are hard and insensible.

ARSENICUM TARTARISATUM.

R Arsenici albi
Crystallorum tartari sing. unc. ij
Aquæ distillatæ lib. j.

These are to be boiled together for half an hour, and afterwards filtered. The clear liquor is then to be evaporated and the residue set aside to crystallize.

This is the arsenical preparation recommended by Mr. Sherwen, and of which an account is given in Vol. II. of Memoirs of the Medical Society of London.

ARSENICUM ANTIMONIATUM.

R Antimonii pulverizati unc. ij Arsenici pulverizati unc. j.

These are to be fluxed together in a crucible, and afterwards reduced to powder.

This is the caustic so extensively used, under the name of arsenical caustic, by the late Mr. Justamond in his treatment of cancers. It is, perhaps, one of the most valuable of this class of remedies, being remarkably well calculated for the destruction of excrescences, or for the removal of parts, in ill-conditioned ulcers, which seem to obstruct their healing.

It may be reduced to any degree of mildness by the addition of powdered opium, which in some measure, also acts specifically, in diminish-

ing the violence of the pain.

BALSAMUM PERUVIANUM CUM FELLE.

B. Fellis hovis drach. iij Balsami peruviani drach. j. misce.

This is a remedy of the late Dr. Hugh Smith, who directed it to be occasionally dropped into the ear in those cases where a constant discharge of fœtid matter indicates a diseased state of its secretions. The gall employed in it, has also the property of softening the wax, so as to render it more removable by simple syringing.

CALOMELAS. (L)

This preparation of quicksilver is in such general use as to need no particular description. It may indeed be proper to observe, that this remedy has of late years been administered with success, by Mr. Clutterbuck, in those parayltic

affections which have been occasioned by the absorption of lead. In these cases, it not only acts generally on the system, but locally on the intestines, so as to obviate the constipation which commonly takes place.

CALX CUM KALI PURO. (L)

This is the causticum commune fortius of the old Dispensatory. The principal use to which it has been applied, has been for the purpose of opening abscesses; but this is far more expeditiously done by the application of kali purum.

When used, it is to be mixed with as much soft soap as will make it into the consistence of a paste, and on that part of the abscess which is intended to be penetrated, there must be applied an adhesive plaster, of three or four folds, and in which a hole is cut of a proper size for the reception of the caustic. Into this aperture, the paste must be pressed down till it comes in contact with the skin, and secured with a bandage till the effect is produced.

The late Mr. Else, in the radical cure of the hydrocele, employed this caustic with a mixture of powdered opium, by which the eschars were produced with little or no pain to the patient.

CATAPLASMA ACETI.
This cataplasm may be made with vinegar

and oatmeal only, or with the addition of bread crumbs. It is a simple but effectual remedy for sprains or bruises, and answers best if applied cold, in which state it also has considerable effect in stopping the progress of scrofulous enlargements of the bones. A small quantity of linseed-meal may be added, to give the whole a greater degree of tenacity than can be expected from the bread and oatmeal where heat is not employed.

CATAPLASMA ALUMINIS. (L)

This is prepared by briskly stirring a lump of alum in the whites of two eggs, till they form a coagulum, which is found very serviceable in ophthalmia, that of the purulent kind more especially. It is to be applied to the eye between two pieces of thin linen rag. As a remedy for chilblains it is also very efficacious.

CATAPLASMA BRIONIÆ COMPOSI-TUM.

R Radicis brioniæ unc. iij Florum sambuci unc. j Gummi ammoniaci unc. ss Ammoniæ muriatæ drach. ij Spiritus camphorati unc. j.

After boiling the briony and elder flowers till

they become tender, they must be bruised, and the gum ammoniac, previously dissolved in vinegar, must be added to them. The muriated ammonia and the camphorated spirit are lastly to be joined, and the whole mixed together into a cataplasm. This is the cataplasma discutions of the old Edinburgh Pharmacopoeia.

CATAPLASMA CALCIS.

R Calcis

Farinæ avenæ sing. unc. ij Adipis suillæ præparatæ unc. iv.

The lime being slacked with a sufficient quantity of water, the lard and oatmeal are to be afterwards added. This is in use at the Bath Hospital as a remedy in knee cases.

CATAPLASMA CALCIS VITRIOLATÆ.

The use of plaster of Paris as a cataplasm for ulcers, was introduced into practice by Mr. Blizard at the London Hospital. Its effects were at first thought very flattering, though the principle on which it was applied has never been clearly explained. The powdered plaster is mixed in the common way, with water, and applied, while soft, to the ulcer where it hardens and is suffered to remain for two or three days before it is renewed.

Mr. Home says, "Plaster of Paris is an application I was led to make use of several years ago, from an idea that it would absorb the matter of a superficial sore as fast as it was secreted, and form a crust, which, similar to a scab, would induce the parts underneath to skin over; experience, however, proves that this is not the case; and the edges of the sore in many instances, were much irritated by this application."

Whether there be any other mode of employing Plaster of Paris to anomalous ulcers, by which their healing may be promoted, can only be determined by farther experiments.

CATAPLASMA CARBONIS.

To about half a pound of the common farinaceous cataplasm, two ounces of wood charcoal, in very fine powder, are to be added, and the whole mixed well together.

This remedy is in use at the Worcester Infirmary, where it is found of considerable service in sweetening fætid ulcers and disposing them to granulate favourably.

CATAPLASMA CEREVISIÆ.

This is prepared by stirring into the grounds of strong beer, as much oatmeal as will make it of a suitable consistence. It is sometimes em-

ployed as a stimulant, but most commonly as an antiseptic to mortified parts.

CATAPLASMA CICUTÆ.

To the fomentum cicutæ add as much oatmeal and linseed flour as will sufficiently thicken it. This poultice is applied to cancerous and scrofulous ulcers, and to anomalous sores of an inveterate character, to diminish their sensibility and amend the discharge. The fresh herb, bruised, was preferred for these purposes, by Mr. Justamond, and is perhaps more to be relied on.

CATAPLASMA CUMINI. (L)

R Seminum cumini lib. j
Baccarum lauri
Foliorum scordii exsiccatorum
Radicis serpentariæ Virginianæ sing.
unc. iij
Caryophyllorum aromaticorum unc. j.

These ingredients are directed, by the College, to be powdered and formed into a cataplasm with thrice their weight of honey. This remedy is seldom used at present, but was formerly considered as a useful antiseptic, and applied, with that view, to mortified parts.

CATAPLASMA DAUCI.

This cataplasm, which has been found of ser-

vice in sweetening putrid ulcers, particularly those of the cancerous kind, is prepared merely by boiling carrots a sufficient length of time and mashing them into a pulp. Turnips are sometimes prepared in the same way, and are found to answer the same purpose. Both are to be applied to the ulcer, without the intervention of lint or any other substance.

It is common with some practitioners, to apply these substances in their raw state, and finely grated. But this kind of poultice, in which the particles are austere and granular, does not seem to be preferable to the former in its effects, and, to an irritable sore, cannot but be a very uncomfortable kind of application.

CATAPLASMA EFFERVESCENS.

This cataplasm is prepared by stirring into an infusion of malt (such as may be readily obtained from the ale or porter brewers) as much oatmeal as is required to make it of a proper thickness, and afterwards adding about a spoonful of yeast. This is by much the most effectual way of applying carbonic acid gas to ulcers, cancers, or other local affections requiring to be treated with powerful antiseptic remedies. In applying it, care must be taken not to bind it on too closely; as the fermentation, a short time after its application, will be considerable, and its bulk, of course, so increased, as to put the

cloths and bandages which confine it very much on the stretch.

CATAPLASMA FARINACEUM.

It has been the custom, for a very long period, to employ milk in the composition of a bread-poultice; but as it is liable to turn sour by the heat of the body, and possesses no greater property of relaxing the skin than water, we should prefer the latter. It is prepared effectually and with very little trouble, by merely soaking slices of new bread, in boiling hot water, till they are swollen and perfectly soft. It is necessary to pour away, and even to press out, as much water as may appear to be superfluous, and the bread may then be beaten up with a spoon.

This composition will be rendered still more complete, if we stir into it a small quantity of linseed-meal, which has the double advantage of binding its parts together, so that it shall not smear and cling to the skin, and also of retaining, for a much longer time, that moisture, on the preservation of which, its beneficial properties

chiefly depend.

The copious use of oil, or any kind of unguent in poultices, is destructive of their efficacy, and cannot be too strenuously prohibited.

CATAPLASMAFARINÆ COMPOSITUM.

R Farinæ secalis lib. j Fermenti veteris acris unc. iv Natri muriati unc. ij.

These being wrought into a paste with hot water, are to be immediately wrapped round the part affected, and renewed morning and evening.

This is the cataplasma stimulans of Dr. Hugh Smith, by whom it was prescribed as a remedy for those anomalous swellings which arise from viscid secretions. It was first introduced into England by the Hessians and Hanoverians, with whom it is much in use, for gouty and rheumatic affections.

CATAPLASMA GALBANI COMPOSI-TUM.

Radicis lillii albi unc. iv
Caricarum unc. j
Radicis cepæ vulgaris contusæ unc. iss.
Galbani unc. ss
Pulveris seminis lini q. s.

The lilly-roots and figs are to be boiled and bruised; the onions are to be afterwards added, and likewise the galbanum, previously incorporated with the yolk of an egg.

This differs little from the old Edinburghcataplasma suppurans, except in the omission of the yellow basilicon and oil of chamomile. The design of it is obvious.

CATAPLASMA KALI ACETATI.

R. Kali acetati unc. j Aquæ distillatæ unc. xx. Micæ panis q. s. misce.

This is found to be a useful application tocancerous and ill-conditioned sores.

Common vinegar, saturated with kali; and afterwards formed into a cataplasm, answers equally well, and is the remedy employed by Mr. Nayler, at the Glocester Infirmary, under the name of cataplasma neutrale.

CATAPLASMA LINI:

Linseed-poultice is made by stirring a sufficient quantity of the meal into boiling water.

This is reckoned a good emollient, and is universally adopted by the hospitals; but it is doubtful whether the poultice of bread and linseed do not excel it, as there is too great an abundance of slimy mucilage in the linseed alone, to answer, completely, the purposes of a relaxant.

Mr. Hunter expresses his approbation of the

the linseed-poultice, and his objections to the popular mode of making a common poultice, in the following terms. He says, "Poultices are commonly made too thin; by which means, the least pressure, or their own gravity, removes them from the part: they should be thick enough to support a certain form when applied.

"They are generally made of stale bread, and milk. This composition, in general, makes too brittle an application; it breaks easily into different portions, from the least motion, and often leaves some part of the wound uncovered, which

is frustrating the first intention.

"The poultice which makes the best application, and continues most nearly the same between each dressing, is that formed of the meal of linseed: it is made at once, and when applied, it keeps always in one mass."*

* Mr. Payne recommends for hospital use, a poultice in which linseed is the principal ingredient, and bread entirely omitted, by which the expence is considerably lessened.

In the Infirmary of St. George's, Hanover-square, Mr. Payne found the usual poultice and the expense attending it, to be as follows:

	5.	a.
"Bread, 49lb. at 21/4d. per pound	10	21/2
Milk, 14 quarts, at 2d. per quart	2	4
Lard, 24lb. at 9d. per pound	I	81
	14	23/4

Speaking of the propriety of applying this poultice to wounds, in preference to dry lint, Mr. Hunter says,

"The kind of wound to which the above application is best adapted, is a wound made in a sound part, which we intend shall heal by granulation. The same application is equally proper when parts are deprived of life, and consequently will slough. It is therefore the very best dressing for a gun-shot wound, and probably for most lucerated wounds: for lint, applied to a part that is to throw off a slough, will often be retained till that slough is separated, which will be for eight, ten, or more days."

CATAPLASMA LITHARGYRI ACE-TATI.

R Aquæ lithargyri acetati drach. j Aquæ distillatæ lib. j Micæ panis q. s. misce.

In lieu of this, Mr. Payne recommends-	T-	
	s.	d.
" Fine pollard, 3½ pecks, at 6d	1	9
Genuine linseed flour, 14lb. at 4d	4	8
Lard, 41b	0	24
	,	
	6	72

The composition here recommended will doubtless answer every purpose, especially if the last article be omitted. This poultice is a suitable vehicle for the lead, and is proper to be applied in cases of local inflammation, or to improve the state of unhealthy sores.

CATAPLASMA MALI MATURI.

This is a good and convenient cataplasm for inflamed eyes. The apples are to be thoroughly roasted, and the soft pulp separated, and applied to the eye without any intervening substance.

It may not be amiss to mention here, that in all cases of ophthalmy where a cataplasm is preferred, it should be applied to the naked eye, unless its ingredients be so rough or the eye so irritable as to render that imprudent; in which case, the usual way of inclosing it between two pieces of gauze or thin muslin rag is to be adopted, though the experiment will at once shew, how impossible it is, in this way, to bring the remedy closely into contact with the diseased part.

This cataplasm is among the remedies employed in the Hospital of Invalids at Paris, but the apples are there directed to be mixed with milk, which, coagulating, forms a compound probably of less efficacy than the apples alone.

The following more complicated formula, in which apples are included, was employed by the German professor De Haen:

R Mali maturi

Micæ panis sing. unc. ij Florum rosarum damascenarum Florum sambuci sing. pug. j Camphoræ gran. viij Cerussæ acetatæ gran. iv.

To these must be added a sufficient quantity of boiling water to make the whole perfectly soft; and care also taken, by previously rubbing them together with a little mucilage, to distribute equally through the whole mass, the two last ingredients.

CATAPLASMA NATRI VITRIOLATI.

R Natri vitriolati unc. j Aquæ ferventis lib. ss Micæ panis q. s. misce.

This formula is attributed to Dr. Kirkland, and is said to be particularly useful in xerophthalmia, or that kind of inflammation of the eye where the secretions are deficient.

CATAPLASMA PAPAVERIS ALBI.

Re Fomenti papaveris albi lib. j Micæ panis q. s. misce.

This poultice, on account of its sedative qualities, which, if necessary, may be farther in-

ereased by adding to it a solution of opium, is very properly applied to parts in an irritable state, and in all external cases where it becomes an object to alleviate pain.

CATAPLASMA OXALIS.

The application of Sorrel, has been found serviceable in the treatment of ulcers, particularly of the scrofulous kind, and even for tumours

of the latter description.

Mr. Sandford, of Worcester, applies the bruised leaves alone, if the skin is unbroken, and the part capable of bearing the stimulus. In other cases he joins it, after being well bruised, to a soft poultice of oatmeal and small beer; regulating the quantity according to the tenderness and irritability of the part to which it is to be applied.

The herb called meadow-sweet, and also meadow-sorrel root, are said to have been employed

with advantage, in similar cases.

CATAPLASMA QUÈRCUS MARINI.

This is prepared by bruising a quantity of the marine plant commonly called sea tang, which is afterwards to be applied by way of a poultice.

Its chief use is in cases of scrofula; white swellings and glandular tumours more especially. Where this vegetable cannot be obtained in its recent state, a common poultice of sea-water and oatmeal has been substituted by the late Mr. Hunter and others surgeons of eminence.

CATAPLASMA RADICIS SOLANI TU-BEROSI.

A quantity of raw potatoes are to be pounded in a mortar to a proper degree of fineness. This, though a vulgar remedy, is nevertheless a very useful application to parts that have been scalded or burnt, but chiefly in the former case. They are to be applied cold; and this, according to the old principle on which burns have heretofore been treated, contributes farther to the property they possess of resisting the progress of the inflammation. Possibly, however, the juices of this root may possess stimulating properties.

CATAPLASMA ROSÆ.

R Conservæ rosæ unc. ij Aluminis drach. ss.

The alum is to be finely pulverized and mixed with the conserve. This is reckoned a useful application in the latter stages of ophthalmy.

CATAPLASMA SINAPEOS. (L)

Redullæ panis sing. lib. ss

Aceti q. s. misce.

This is seldom employed in surgical cases, but certainly admits of it, and is inserted on that account.

CAUSTICUM ANTI-CANCROSUM.

R Ranunculi acris foliorum Flammulæ vulgaris foliorum sing. unc. i Arsenici albi lævigati drach. j Florum sulphuris scrup. v.

The crow's-foot and dog's-fennel being fresh gathered and bruised, the other ingredients are to be added, and the whole beaten into a paste. This is to be formed into balls and dried in the sun. When used, they are directed to be powdered, mixed with the yolk of an egg, and applied, on a piece of pig's bladder, to the surface of the cancer. In this state the caustic is to remain, till the eschar separates spontaneously. In using this, which is the celebrated cancer remedy of Mr. Plunkett, great circumspection is at all times necessary, particularly in applying it to cancers of the nose or lips, on account of the danger of swallowing a portion of the arsenic.

This caustic has been successfully employed by Mr. Blicke, with a view of exciting a new action in those troublesome sores, which sometimes surround the root of the nail; and which in general, are found to be extremely difficult of

cure.

CAUSTICUM OPIATUM.

R Calcis cum kali puro drach. iij Opii pulverizati drach. ss. Saponis mollis vulgaris q. s.

The caustic powder and the opium being mixed together, are to be formed into a paste with

the soap.

This is the caustic employed by the late Mr. Else, of St. Thomas's Hospital, in the radical cure of the hydrocele. The mode of using it, is by applying to the lower and anterior part of the tumour, a common adhesive plaster, spread on leather, and consisting of several folds or thicknesses, through which is made a circular hole, or well, for the reception of the paste. This is suffered to lie on for eight or ten hours; at the end of which time, without having given the patient much pain, it will be found to have penetrated down to the tunica vaginalis; and the remaining treatment consists only in applying poultices till the escar sloughs, the water is evacuated, and the cure completed. It may not be improper however to add, that the application of kali purum answers equally well in the cure of the hydrocele, and the pain it occasions is inconsiderable.

CERATUM CALOMELANOS.

R Calomelanos drach. j
Cerati lapidis calaminaris unc. ss misce.

This is a good occasional application to ulcers, and is more particularly serviceable in those of a venereal kind, when previously cleansed by caustic or irritating remedies.

CERATUM CANTHARIDIS. (L)

R Cerati spermatis ceti drach. vj Cantharidum drach. j.

The cerate being softened by the fire, the cantharides, powdered, are to be mixed with it.

The use of this is merely to keep up a discharge from blisters.

CERATUM CRETÆ ACETATÆ COM-POSITUM.

R Emplastri lithargyri unc. viij
Olei olivæ
Cretæ præparatæ
Aceti distillati sing. unc. iv
Aquæ lithargyri acetati unc. ss.

The litharge plaster and the oil having been melted together, are to be incorporated with the

prepared chalk. When the mixture is sufficiently cooled, the water of acetated litharge is to be mixed with the distilled vinegar, and the whole gradually stirred in.

This is Dr. Kirkland's neutral cerate, a remedy much employed in his practice, and in great repute as an application to inflamed parts and to ulcers. It may indeed be considered a very neat and efficacious remedy.

CERATUM HYDRARGYRI.

R. Ceræ flavæ
Adipis suillæ sing. lib. ss
Hydrargyri purificati unc. iij
Olei sulphurati drach. j.

The quicksilver being well rubbed down with the sulphurated oil, and the wax and lard melted together, the latter mixture is to be gradually added and stirred into the former, so as to ensure a complete division of the particles of quicksilver through the whole composition.

This is the ceratum mercuriale of the late London Dispensatory, and seems to have been expunged by the College without any good reason, as it is still in repute with the best practitioners as a remedy for old ulcers. It has a very good effect, when employed as an outer dressing, in softening their callous edges, and restoring the

discoloured skin, which usually surrounds them, to an healthy state.

CERATUM HYDRARGYRI NITRATI.

R Unguenti hydrargyri nitrati Cerati spermatis ceti sing. ung. ij misce.

This composition, which is employed at St. Bartholomew's Hospital, is designed as an application to scrofulous or phagedænic ulcers.

CERATUM LAPIDIS CALAMINARIS.

(L)

R Lapidis calaminaris præparati Ceræ flavæ, sing. lib. ss Olei olivæ lib. j.

Melt the wax and oil together, and when sufficiently cool, stir in the calaminaris. This is well known as an application supposed to promote the cicatrization of ulcers, but whether it really does so may be doubted after Mr. Home's account of the trials made with its leading ingredient.

Mr. Home says, "Lapis calaminaris, in the form of powder, has had a character with several surgeons for having the power of disposing superficial sores to skin over. I used it in a great many instances, and no one circumstance has oc-

curred, from which I could conclude in favour of its efficacy."

Whether the other ingredients in this composition exclusively possess the properties attributed to the whole, which is by no means likely; whether any good quality is imparted to them by the calamine; or whether the mechanical effects of the latter are abated, and thus rendered more soothing to the surface of an ulcer than could be expected from its application "in the form of powder," are points which remain to be ascertained.

CERATUM LAPIDIS CALAMINARIS CUM HYDRARGYRO.

R Cerati lapidis calaminaris lib. ss Hydrargyri nitrati rubri unc. ss misce.

The red nitrated quicksilver should be very finely levigated, and mixed with the cerate.

This application answers remarkably well, in bringing about an healthy appearance in sluggish and ill conditioned ulcers.

CERATUM LITHARGYRI.

Remplastrum lithargyri
Adipis suillæ sing. lib. ss
Ceræ flavæ unc. j
Aquæ lithargyri acetati unc. iv.

In preparing this cerate, the three first ingredients must be melted together, and when almost cold, the water of acetated litharge is to be gradually incorporated, stirring the whole till perfectly cold.

It is a useful remedy for superficial sores, or as an external dressing to ulcers whose edges are inflamed.

CERATUM LITHARGYRI ACETATI COMPOSITUM. (L)

R Aquæ lithargyri acetati unc. iss Ceræ flavæ unc. iv Olei olivæ unc. ix Camphoræ drach. ss.

In preparing this, the camphor is to be rubbed down with a little oil, and added gradually to the other ingredients when they are become nearly cold.

CERATUM MELLIS.

R Olei olivæ Mellis despumati sing. lib. ss Ceræ flavæ Emplastri lithargyri sing. unc. iv.

The oil, wax, and litharge plaster, are to be melted together, and the honey afterwards added.

This cerate is employed at St. Bartholomew's Hospital, and appears to be well calculated for strumous sores, or for ulcers that require a degree of stimulus.

By substituting for the last article six ounces of Emplastrum lithargyri cum gummi, we form a remedy, in very high repute in Lancashire, for the cure of scrofulous sores, those especially which we often see between the fingers and toes of young children.

CERATUM MELLIS CUM TEREBIN-THINA.

R. Terebinthinæ vulgaris lib. j Ovorum vitellos No. xx Mellis despumati lib. j.

The eggs and the honey are to be beaten together; and the turpentine, a little softened by the fire, is afterwards to be joined.

This is an old formula from Paracelsus. Cases now and then occur, in which such a remedy may be very suitable.

CERATUM RESINÆ FLAVÆ. (L)

R Unguenti resinæ flavæ lib. ss Ceræ flavæ unc. j.

These are to be melted together in the usual way.

CERATUM RUBRUM.

R Ceræ flavæ

Adipis suillæ præparatæ sing. lib. ss Resinæ flavæ unc. ss Hydrargyri sulphurati rubri gran. xv.

This forms a cheap and elegant cerate for external dressings.

CERATUM SALIS CORNU CERVI.

R Salis cornu cervi drach. ss Unguenti ceræ unc. ss misce.

This cerate was occasionally employed, at one of the London Dispensaries, as an application to scrofulous sores, and often with very good effect.

On account of the volatile nature of the principal ingredient, it should either be mixed at the time of using, or kept from the air in a screw-covered ivory box.

In some instances these proportions stimulate too much, and must be regulated according to the sensibility of the sore.

CERATUM SAPONIS. (L)

R Lithargyri lævigati lib. j Aceti cong. j Saponis unc. viij Olei olivæ Ceræ flavæ sing. lib. j.

This is the soap cerate of St. Bartholomew's Hospital, and adopted by the College. In preparing it, the utmost caution must be used. The three first ingredients are to be mixed together and boiled gently till all the moisture is evaporated; after which, the wax and oil, previously melted together, must be added. The whole composition, from first to last, must be incessantly and effectually stirred, without which the whole will be spoiled. This formula was introduced into practice by Mr. Pott, and is found to be a very convenient application in fractures, and also as an external dressing for ulcers; being of a very convenient degree of adhesiveness, and at the same time possessing the usual properties of a saturnine remedy.

In applying this cerate, spread on linen, in fractures of the leg or arm, one caution is necessary to be observed, namely, that it be in two distinct pieces; for if, in one piece, the limb be encircled by it, and the ends overlap each other, it will form a very inconvenient and partial constriction of the fractured part, in consequence of the subsequent tumefaction.

CERATUM SPERMATIS CETI. (L)

R Spermatis ceti unc. ss Ceræ albæ unc. ij Olei olivæ unc. iv. The uses of this simple formula cannot be misunderstood. The ingredients, when melted, should be constantly stirred till they become cold.

CEREI MEDICATI.

These bougies are calculated to act medicinally on strictures in the urethra, but there exists a serious objection to all that are composed of very active ingredients, namely, that the healthy, no less than the unsound parts of the urethra, are exposed to their effects, and may become diseased in proportion as the diseased parts become sound. For these reasons, and because of the impossibility of medicating so much and no more of the bougie than comes in contact with the stricture, surgeons have, for the most part, given up the use of them. The following however are the formulæ that have been most in repute.

No. I.

Re Olei olivæ lib. j Ceræ flavæ Picis burgundicæ sing. unc. iv Spermatis ceti unc. ij Emplastri diabotani (Pharm. Parisian.) unc. j.

Besides these ingredients directed by Mr.

Daran, are the absurd additions, of a living pigeon plucked and half a pint of port wine. These, together with the oil, are (not less humanely than scientifically) ordered to be boiled together, adding, after the pigeon is taken out, the remaining ingredients, and last of all-from two to sixteen drams (according to the degree of causticity required) of the burnt sole of a shoe, finely powdered.

No. II.

R. Ceræ albæ unc. iv

Spermatis ceti unc. iss

Unguenti rosati, et

Emplastri cerussæ (Pharm. Parisian.)

sing. unc. j.

These being melted together, form the composition of which Mr. Daran made, what he called, his emollient and healing bougies. If it prove of too hard a consistence, we are directed to add a small quantity of oil of almonds.

No. III.

R Emplastri lithargyri burgundici unc. ij Hydrargyri purificati unc. j Olei sulphurati q. s. Antimonii præparati unc. ss. The quicksilver is to be extinguished in the sulphurated oil, and added to the other ingredients when sufficiently cooled. This is the bougie composition of the late Mr. Samuel Sharp.

No. IV.

R. Hydrargyri purificati drach. iij Plumbi drach. ij Antimonii præparati unc. j. Ceræ flavæ lib. j.

An amalgam is to be formed with the quicksilver and lead, and the other ingredients afterwards added.

No. V.

R Ceræ flavæ lib. j.

Terebinthinæ chiæ unc. iv

Hydrargyri sulphurati rubri unc. j.

The wax and turpentine being melted together and suffered to cool a little, the red sulphurated quicksilver is afterwards to be stirred in. This and the preceding formula, are among the prescriptions of St. Bartholomew's Hospital.

Some surgeons have preferred the common plaster bougie with a little red nitrated quick-silver, or some other escharotic, rubbed upon, or rather incorporated with, the small end, which they have afterwards endeavoured to

pass into the stricture. But the objections to this method are obvious.

CEREI SIMPLICES.

Simple bougies, or those designed to act mechanically on strictures in the urethra, have been prepared from various receipts which it is scarcely worth while to enumerate; the ingredients being, for the most part alike, but differing in their proportions. We shall therefore confine our account to the following compositions, the former of which is recommended by Mr. Hunter.

» No. I.

R Olei olivæ lib. iij Ceræ flavæ lib. j Minii lib. iss.

These are to be boiled together over a slow fire for six hours. Bougies made with this composition will be found much too soft for immediate use, but after keeping some months, will acquire sufficient firmness. If this be an objection however, it may easily be removed and the plaster made of a stiffer consistence, by adding two or three ounces more wax and the like quantity of minium, and continuing the boiling till the latter is dissolved.

Bougies ought to be smooth and supple, and

yet of sufficient firmness to admit of being pretty strongly urged by the hand of the surgeon, without bending or twisting in the urethra. They are formed of narrow slips of thin linen rag, which, after being equally dipped into the melted composition, are firmly folded up and afterwards rolled on a marble slab till their surface is perfectly uniform. Their shape should be nearly equal except towards the point, which should taper very gradually for about the length of an inch.

A tolerably good composition for bougies may also be formed with litharge plaster and yellow wax, to which may be added, a small quantity of red sulphurated quicksilver. The

following formula is from Swediaur.

No. II.

R. Ceræ flavæ lib. j Spermatis ceti drach. iij Cerussæ acetatæ drach. ij ad viij.

These are to be boiled together as in the former instance, and the proportion of acetated ceruse regulated according as the bougies are designed to be of a firmer or a weaker consistence. When cf a large size they should always be of the latter description, that they may the more readily conform to the shape of the passage when introduced.

Mr. Bell has given us the following still more simple formula for the composition of bougies.

No. III.

R. Emplastri lithargyri unc. iv. Ceræ flavæ unc. iss Olei olivæ drach. iij.

We are directed to melt the wax and oil in one vessel, and the litharge plaster in another, and afterwards to mix them together. Possibly by this precaution, and by melting the plaster very gradually, we may prevent the great number of air-bubbles which generally are let loose in this kind of composition, and which prove extremely inconvenient in dipping the strips of linen.

Bougies are likewise formed of catgut, a substance well calculated to penetrate a strictured part in the first instance, as it admits of being made smaller than the plaster bougie and yet possesses a sufficient degree of elasticity and strength to allow of being pushed forward with some force. Catgut bougies are also well calculated to pass through an aperture which takes a winding sort of direction, a case in which the common bougie very frequently fails. They do less however towards dilating the stricture than is generally supposed, as they soon become

soft and flabby, and in that state, rather yield to the pressure of the stricture, than produce the effect of dilating it.

A later invention, in which catgut is involved in elastic gum, is also a valuable improvement in the composition of simple bougies. The gum defends the catgut from the moisture of the urethra, and renders the bougie pliant in all its parts, whilst a very suitable degree of firmness results from the intermixture of the catgut. Some inconvenience however arises from the coat of varnish with which these bougies have been covered; the urethra being subject to very considerable irritation from this cause, especially when it has been necessary to retain the bougie for any length of time.

But superior to these, in certain cases, is the metallic bougie of Mr. Smyth, which unites the flexible property of lead to the white lustre of silver. It appears to be made of tin-foil metal, which is wrought into bougies solid and hollow, or into catheters for either sex. Some surgeons prefer the forcible dilatation of a stricture, producing a degree of laceration which shall admit a bougie corresponding to the full dimensions of the urethra in its soundest part. Where this is thought expedient, the solid metallic bougie, on which, notwithstanding its easy flexibility, the parts to be so penetrated are unable to make any im-

pression, is the most suitable instrument for the purpose. But they are no less perfectly adapted for the usual purposes to which bougies have been applied, and particularly for the original examination of the urethra, to ascertain the seat of a stricture.

By the way, it may not be improper to observe, that the practice of keeping the bougie in, as formerly directed by Mr. Sharp and others, for several hours together, has been relinquished many years, on account of the injury supposed to be done by it to the functions of the musculi acceleratores urinæ. On the contrary, it is now the practice with many surgeons to order the bougie to be worn only ten or fifteen minutes at a time; but there certainly are cases where this treatment must be ineffectual. Our best general guide however is, the patient's feelings; both as to the size of the bougie, the frequency of its application, and the time it should remain in the strictured part; for if, by an excess in any of these particulars, we occasion a great degree of irritation, we infallibly bring on spasm and retard the cure.

The treatment of strictures by caustic, has been spoken of under the article argentum nitratum.

CERUSSA ACETATA. (L)

This is a good escharotic for the cure of

shankers, for which purpose it is only necessary to sprinkle them lightly and cover them with lint.

Solutions of this preparation, have been used in a variety of cases by way of collyrium, lotion, &c. On this it is perhaps only necessary to observe, on the authority of Dr. Fordyce, that these combinations are not by many degrees so powerful, as those in which the aqua lithargyri acetati is an ingredient.

CINCHONA.

The variety of forms in which this remedy is exhibited, and its great importance in surgical diseases, render the mention of it in these pages,

a matter of indispensable. necessity.

In all cases where the constitution is to be sustained against the injuries of local disease, we are to avail ourselves of its assistance, but more particularly in mortifications, where the powers of the system appear to be on the decline. In these, as indeed in every case, it should be exhibited in substance, and in as large a quantity as the stomach will bear, till the object of its being given is accomplished.

Dr. Cullen's remarks on the use of Cinchona in surgical diseases are well worth a place in this article. "Bark (says he) is also employed in gangrene and mortification. Its efficacy is now sufficiently established by universal consent. If any doubt remain of its virtue where the ill success has not arisen from mismanagement, it may perhaps be thus explained. There are properly two kinds of gangrene; the one kind arising from the violence of inflammation purely, the other from a flaccidity of the vessels of the part, or at the same time an atonia of the whole system. Every body knows the first; the last is what occurs in hydropic, paralytic, or old people. It is in the last the bark seems peculiarly appropriated, and very seldom, in these cases, if given in a proper dose, does it fail to bring on a suppurative inflammation, and separate the mortified part. In purely inflammatory gangrene, if it has not been successful, it is from improper exhibition, and the reason is obviously this, that the bark, acting by giving tone to the moving fibres, must certainly be hurtful where that is already so much encreased by disease."

He observes, farther, that "the Peruvian bark does not operate by its aroma; for the pulse, by it, is not increased above its healthy standard; and although it takes off flaccidity, yet it does not irritate the heart and vessels. It is necessary to observe this in order to talk of the cure by suppuration. Where suppuration is wanting, it depends very often on the flaccidity of the part.

In this case it is brought on by stimulants applied to the part. It is in this manner that I think all the balsamic substances act, and likewise copper, and mercury, viz. in restoring the tone of the flaccid fibres. In the same way, in stagnating, ichorous, and sanious ulcers, the bark mends the suppuration and brings on a kindly healing of the sore.

"The bark has been said to cure cancers, but in all of these its effects are not remarkable; and we are indeed liable to be deceived, as, very often, where there is an ulcer mali moris, it is apt to be confounded with cancer. But even in cancers I have seen its good effects, and the matter mended by its use; and ulcers pessimi moris I have seen cured by it. In short, wherever a suppuration is to be carried on, not in its own nature inflammatory; and wherever, in such cases, there is a tendency to the sinking of the vis vitæ the bark is useful."

To this account, which sufficiently evinces the principle on which Cinchona should be administered in surgical diseases, it is only necessary to add, that the end in view may frequently be very essentially promoted, by giving stimulants along with it; and, in certain cases, as the mortification of the toes and feet in old people, opium.

COLLYRIUM ALUMINIS.

R Aluminis purificati scrup. j Aquæ rosæ unc. vj.

The alum being dissolved in the rose-water makes a good astringent collyrium. It is in use at Guy's Hospital.

COLLYRIUM AMMONIÆ ACETATÆ.

R Aquæ ammoniæ acetatæ
Aquæ rosæ sing. unc. j. misce.

This is a most useful application to inflamed eyes, where there is an high degree of irritation and pain, and will often succeed when other collyria have been ineffectually tried.

In this, as in the application of all fluid remedies to the eye, it is of importance to bring them into contact with the part, and even to suffer them to pass between the eyelids. They are therefore most effectually applied with the assistance of that useful vessel called an eye-cup; or, where the more permanent application of the remedy is requisite, single bits of fine linen rag may be dipped into the liquid and laid one over another; the outer pieces being occasionally taken off and dipped afresh as the fluid evaporates.

In some cases, the aqua ammoniæ acetatæ may be used undiluted.

COLLYRIUM AMMONIÆ ACETATÆ CAMPHORATUM.

R. Collyrii ammoniæ acetatæ Misturæ camphoratæ sing. unc. ij misce.

COLLYRIUM AMMONIÆ ACETATÆ CUM' CERUSSA.

B. Collyrii ammoniæ acetatæ unc. iv Pulveris cerussæ compositi drach. j misce.

COLLYRIUM AMMONIÆ ACETATÆ OPIATUM.

Re Collyrii ammoniæ acetatæ unc. iv Tincturæ opii gutt. xl misce.

This is most suitable in an inflamed state of the eye, when the pain is considerable.

COLLYRIUM CERUSSÆ.

R Pulveris cerussæ compositi drach. j Aquæ rosæ unc. iv misce.

This is in use at Guy's Hospital.

COLLYRIUM CUPRI AMMONIATI.

R Æruginis præparatæ gran. iv Ammoniæ muriatæ drach. ss Aquæ calcis recentis unc. viij misce.

This is the aqua cupri ammoniati of the New London Pharmacopoeia, but prepared after that of Edinburgh with regard to the manner of introducing the copper.

It is useful, as a general collyrium, after the inflammatory stage of ophthalmia; but it is more particularly calculated for the removal of slight specks on the cornea; in which case, its introduction *into* the eye is indispensably necessary.

In some cases it is necessary to dilute it with an equal quantity of distilled water.

COLLYRIUM CUPRI VITRIOLATI CAMPHORATUM.

R Aquæ cupri vitriolati camphoratæ drach, ij

Aquæ distillatæ unc, iv misce.

This is strongly recommended by Mr. Ware in the treatment of purulent ophthalmia in children.

COLLYRIUM FLORUM ZINCI.

R Florum zinci scrup. j Aquæ florum sambuci unc. ij misce.

This is an elegant and useful formula of professor De Haen.

COLLYRIUM HYDRARGYRI MURI-ATI CUM CALCE.

R Calcis vivæ drach. ij Hydrargyri muriati scrup. j Aquæ distillatæ lib. j.

The water being made boiling hot, the muriated quicksilver is to be dissolved in it, after which the quick lime is to be added. When the whole is completely mixed, the clear liquor is to be filtered through paper, in a glass funnel, for use.

This collyrium, though apparently composed of very active materials, is not of a stronger quality than the eye can, in most instances, dispense with. In fact, the different elective attractions which operate in the mixture of the lime with the solution of muriated quicksilver, are such as produce a new chemical arrangement, in which the activity of the ingredients is mutually diminished. Experience at least proves,

that this formula, originally suggested by Mr. Coleman, is exceedingly well calculated for the removal of opacities of the transparent cornea.

COLLYRIUM HYDRARGYRI MURI-ATI.

R Liquoris hydrargyri muriati gutt. j Aquæ distillatæ unc. iv misce.

This resembles the collyrium cupri ammoniati in its qualities, and may be weakened or strengthened at pleasure, by varying the proportion of muriated quicksilver.

COLLYRIUM LITHARGYRI ACETATI.

R Aquæ distillatæ unc. iv Aquæ lithargyri acetati gutt. x misce.

COLLYRIUM LITHARGYRI ACETATI CAMPHORATUM.

R Spiritus camphorati gutt. xx Aquæ lithargyri acetati gutt. x Aquæ distillatæ unc. iv misce.

It is necessary to remark, that these ingredients are to be put together in the order set down, otherwise the camphor will be separated,

COLLYRIUM OPIATUM.

R. Opii in pulverem triti gran. j Camphoræ gran. ij Aquæ ferventis unc. iv.

The opium and camphor are to be rubbed together, the hot water then added, and the liquor, lastly, strained through a fine cloth.

This collyrium has very soothing properties, and is suited to those cases of ophthalmia in which there is a peculiar degree of irritability.

COLLYRIUM ZINCI VITRIOLATI.

Re Zinci vitriolati gran. v. ad x Aquæ distillatæ unc. iv misce.

This, which is one of the formulæ of St. Bartholomew's Hospital, is also in use there as an injection.

COLLYRIUM ZINCI VITRIOLATI CAMPHORATUM.

R. Zinci vitriolati drach. ss Camphoræ gran. vj Pulveris radicis iridis gran. x Aquæ rosæ unc. vj.

This is one of the formulæ used in the Hos-

pital of invalids at Paris. The three first ingredients are directed to be beaten in a mortar with the white of a hard boiled egg, but for what purpose it is nor easy to understand; as the rose water is afterwards to be added, and the clear liquor strained off.

The following, from St. Bartholomew's, is perhaps equally good, though much less complex in the preparation.

No. II.

R Zinci vitriolati drach. ss Camphoræ gran. x Aquæ ferventis unc. vj.

The vitriolated zinc being rubbed with the camphor and the boiling water poured on, the clear liquor is to be separated by filtration.

There are few better collyria, than those in which vitriolated zinc forms an ingredient.

CREMOR LITHARGYRI ACETATI.

R Cremoris lactis unc. j Aquæ lithargyri acetati drach. j misce.

This, which is a composition of Dr. Kirk-land's, is useful in ophthalmia, and also in external inflammation; in which cases he applies it either as an unguent, or spread upon linen.

Being powerfully sedative, and remarkable for the degree of cold which attends its application, it proves likewise an admirable remedy for slight burns or scalds.

DECOCTUM ASTRAGALI.

R Radicis astragali exscapi unc. j Aquæ distillatæ lib. iij.

These are to be boiled till only a quart of fluid remain; and the whole is to be taken, a little warmed, in the course of twenty-four hours.

This remedy was tried very extensively in Germany, and said to evince very powerful effects as an anti-syphilitic. An account of it, and of the author of a treatise on the subject, are to be met with in the London Medical Journal, published by Dr. Foart Simmons.

DECOCTUM BARDANÆ.

R Radicis bardanæ unc. vj / Aquæ distillatæ lib. vj.

These are to be boiled till only two quarts remain.

From a pint to a quart in a day is given in those cases where sarsaparilla and other remedies that are called alterative, are supposed to be requisite.

DECOCTUM DULCAMARÆ.

R Stipitum dulcamaræ recentium drach.

Aquæ distillatæ lib. iv.

These are to be boiled away to a quart, and strained.

The dose is half a pint in twenty-four hours, mixed with an equal quantity of milk. This remedy is employed in inveterate cases of scrofula; in cancer and phagedæna; in lepra, and other cutaneous affections, and in anomalous local diseases originating in venereal lues.

DECOCTUM HELLEBORI ALBI. (L).

R Pulveris radicis hellebori albi unc. j Aquæ distillatæ lib. ij Spiritus vinosi rectificati unc. ij.

These are to be boiled till the fluid is reduced one half; and to this, when cold, the rectified spirit is to be added.

This decoction is employed as a lotion in cutaneous diseases, but chiefly in the itch, which it frequently cures, and is much more cleanly in the application than the unguents commonly used.

DECOCTUM HORDEI CUM GUMMI.

R Decocti hordei lib. ij Arabici gummi unc. j.

The gum is to be dissolved in the barley decoction whilst warm. It then forms a suitable diluent in strangury, dysury, &c. for the gum, finding a passage into the bladder in an unaltered state, mixes with the urine, and prevents the action of its neutral salts on the urinary canal.

DECOCTUM LOBELIÆ.

Radicis lobeliæ syphiliticæ siccæ manip. j Aquæ distillatæ lib. xij.

These are to be boiled in the usual way till only four quarts remain.

The very desirable property of curing the venereal disease has been attributed to this medicine, but it is not more to be depended on, than guaiacum, or other vegetable substances, of which the same thing has been alledged.

The effects of this decoction are purgative, and the manner of taking it, as described by Swediaur, is as follows. The patient is to begin with half a pint twice a day. The same quan-

tity is then to be taken four times a day and continued so long as its purgative effect is not too considerable. When the case is otherwise, it is to be discontinued for three or four days and then had recourse to again till the cure is completed.

As this is a remedy on the old system, little confidence, we apprehend, ought to be placed in it.

DECOCTUM LUSITANICUM.

No. I.

R. Sarsaparillæ concisæ

Ligni sassafras

Ligni santali rubri

Ligni guaiaci officinalis sing. unc. iss

Radicis mezerei

Seminum coriandri sing. unc. ss

Aquæ distillatæ lib. x.

These are to be boiled till only half the fluid remains. The dose is a quart or more in a day. No. II.

R Sarsaparillæ concisæ
Ligni santali rubri
Ligni santali citrini sing. unc. iss
Radicis glycyrrhizæ
Radicis mezerei sing. drach. ij
Ligni rhodii
Ligni guaiaci officinalis
Ligni sassafras sing. unc. ss
Antimonii unc. j
Aquæ distillatæ lib. v.

These ingredients are to be macerated for twenty-four hours, and afterwards boiled till the fluid is reduced to half its original quantity. From one to four pints are given daily.

The late Mr. Hunter notices this, and also the following formula, in his Treatise on the Venereal Disease.

No. III.

R Sarsaparillæ concisæ
Radicis chinæ sing. unc. j
Nucum juglandis cortice siccatarum
No. xx
Antimonii unc. ij

Antimonii unc. ij Lapidis pumicis pulverisati unc. j Aquæ distillātæ lib. x. The powdered antimony and pumice stone are to be tied in separate pieces of rag, and boiled along with the other ingredients.

This last decoction is reckoned to be the genuine Lisbon diet drink, whose qualities have been

the subject of so much encomium.

DECOCTUM MEZEREI.

R. Radicis mezerei contusi drach. ij Radicis glycyrrhizæ contusi unc. j Aquæ distillatæ lib. ij.

The mezereon is to be boiled till the water is reduced one half, and the liquorice added a short time before it is taken from the fire.

This decoction, given from half a pint to a pint in twenty-four hours, is found serviceable in the lues venerea; but it is more immediately calculated for the removal of strumous affections, or for the cure of those mixed venereal cases where mercury has acted injuriously on the patient's constitution. This is one of the formulæ of Guy's Hospital.

DECOCTUM QUERCUS.

R Quercus contusi unc. j Aquæ distillatæ lib. ij.

These, boiled till only a pint remains, form

an astringent lotion in use at St. Bartholomew's Hospital.

It is a good remedy in prolapsus ani, and may be used also, in some cases, as an injection.

DECOCTUM SAPONARIÆ.

R Herbæ saponariæ recentis contusæ lib. ss Aquæ distillatæ cong. j.

These are to be boiled till only two quarts of fluid remain.

From a pint to three pints or two quarts are directed to be taken, in the course of twenty-four hours, in venereal, scrofulous, or impetiginous affections, and, it is said, with considerable good effect.

DECOCTUM SARSAPARILLÆ (L)

Radicis sarsaparillæ incisæ unc. vj Aquæ distillatæ lib. viij.

These are ordered to be macerated in a heat of 195 degrees, for two hours; after which the sarsaparilla is to be taken out and bruised, and then mixed again with the decoction and macerated two hours longer. It is then to be reduced by boiling to two quarts, and strained.

DECOCTUM SARSAPARILLÆ COM-POSITUM. (L)

Radicis sarsaparillæ incisæ et contusæ
unc. vj
Corticis radicis sassafras
Ligni guaiaci rasi
Radicis glycyrrhizæ contusæ sing. unc. j
Corticis radicis mezerei drach. iij
Aquæ distillatæ lib. x.

These are to be macerated over a slow fire for six hours, and the liquor afterwards reduced, by boiling, to five pints. During the latter part of the process, the mezereon is to be added, and the decoction, after a short time, strained.

This and the foregoing are very generally directed in venereal, scrofulous, and herpetic affections. The dose of the simple decoction is from a pint to a quart, and that of the compound from half a pint to a pint in twenty-four hours.

DECOCTUM ULMI. (L)

R Corticis interioris ulmi contusi unc. iv Aquæ distillatæ lib. iv.

These are to be boiled till only a quart of fluid remains. This decoction is occasionally

found of service in cutaneous diseases, and may be exhibited in the dose of from four, or six, to eight ounces, twice or thrice a day.

ELECTRICITAS.

Among the aids of surgery, electricity once held a conspicuous and important situation. It has, however, met with a fate, not unusual with remedies too much cried up and too indiscriminately employed; that of having fallen, in a great degree, into neglect.

Whatever its effects, however, on the system may be, it certainly possesses this advantage over other topical remedies, that it may be made to act on parts very remote from the surface. By its application in repeated *shocks*, we are sometimes able to restore the action of those nerves, whose diseases may have impaired the senses; and by its use in the way of *friction*, or by drawing *sparks*, complaints of a more superficial nature are removed.

According to Mr. Birch*, "the applicati"ons of the electric fluid to the diseases of the
"human body, may be all comprised under
"three heads. 1st. Under the form of radii,
when projected from a point. 2d. That of
a spark, when many of these radii are concen-

^{*} See the late G. Adams's Essay on Electricity.

"tered on a ball. 3d. Under that of a globe, "when many of these sparks are condensed in "a Leyden jar."

Under the first form, electricity is very advantageously applied, in inflammation of the

eye, or any other highly sensible part.

Under the second, its action may be serviceable, in cases where the common skin can be stimulated with less reserve; as in local inflammations, sprains, bruises, contractions, tumours, paralytic affections, &c.

In the way of repeated shocks, it is likewise of service in the same cases; and is usually employed alternately with the other forms of electricity.

The electrical fluid, as a topical remedy, has been chiefly confined to the following diseases; viz. superficial inflammation, ophthalmia, gutta serena, deafness, scrofulous enlargements, anomalous tumours, fistula lachrymalis, ulcers, cutaneous eruptions, cancers, and abscesses.

Instances are upon record, of its success, in suddenly restoring the sight in gutta serena, the hearing in deafness, and the speech in dumbness, even of many years continuance. It is indeed the performance of a miracle of this sort now and then, that has led us to expect, what however no practitioner ever has found in it, a remedy uniform in its good effects. It is pe-

culiar perhaps to electricity, that it will sometimes do what is not at all expected from it, whilst, on the other hand, it is continually disappointing us in our common intentions. Perhaps the most accurate way in which we can speak of electricity as a remedy in local affections is that suggested by Mr. Abernethy, viz. that it has a tendency to promote whatever action or process happens to be going on in a diseased part at the time of its application.

Amongst the means employed to restore the vital functions, in cases of hanging, drowning, &c. electricity possesses a considerable share of importance; since, by proper management, the heart, lungs, brain and nerves, &c. may be subjected to its salutary stimulus. But its success in this, and indeed every instance, will depend on the perfection of the apparatus employed, and the judgment of the operator in directing the force of the electric fluid.

In the venereal disease, electricity is said to be injurious; for what reason, has never yet been satisfactorily explained; neither indeed is the fact itself well ascertained. It ought to be observed, however, that there is a great singularity attends its use in those persons who are under the effects of a mercurial course. In these, the shock, or even the spark, is attended with considerable more pain than in common in-

stances; and Mr. Hunter mentions the case of a person on whose complaint electricity had no effect, till mercury was administered, after which the same remedy produced a cure.

The discoveries of Galvani on the peculiar electricity of animal bodies, may possibly throw some light, in the course of time, on the modus operandi of the electrical fluid. At present, we are not acquainted with its properties, farther than the evidence we possess of its action as a stimulant.

ELECTUARIUM ANTIMONII.

R' Electuarii sennæ unc. j Guaiaci gummi-resinæ Hydrargyri cum sulphure Antimonii præparati sing. unc. ss Syrupi simplicis q. s. misce.

Of this, from a dram or two drams is given twice a day, in those cutaneous diseases which go under the general name of scorbutic. It is usually accompanied with the decoctions of elm-bark or sarsaparilla.

ELECTUARIUM CARBONIS.

R Carbonis; Salis sodæ; sing. drach. ij Electuarii sennæ unc. iv. misce. This electuary is applicable to a great variety of purposes, but it has been principally employed in the New York Hospital, by Drs. Mitchell and Miller, in scrofulous cases. It is said also to be a most pleasant and effectual remedy in all cases of habitual costiveness. From half an ounce to two ounces are given twice or thrice a day.

ELECTUARIUM CINCHONÆ CUM NA-TRO.

R. Natri præparati drach. ij Pulveris cinchonæ unc. j Mucilaginis arabici gummi q. s misce.

In this composition, mucilage is preferred to syrup, on account of its covering the taste of the bark much more advantageously. It should, for this purpose, however, be made thin, otherwise it will increase the bulk of the electuary too much.

This remedy will be found an excellent substitute for the burnt sponge, whose powers, as a remedy in scrofula, are proposed solely to depend on the supportion of natron contained in it. The dose is two drams twice or thrice a day.

ELECTUARIUM OLIBANI.

Regummi olibani pulverisati
Balsami copaibæ sing. unc. ss
Conservæ cynosbati unc. j
Syrupi simplicis q. s. misce.

This electuary is in use at Guy's Hospital, as a remedy for gleets, fluor albus, &c. in the dose of two drams twice or thrice a day. The olibanum and copaiba probably act, in these cases, by finding a passage into the urine in an unaltered state, a circumstance very common with terebinthinate remedies.

ELECTUARIUM SENNÆ COMPOSITUM. (L)

Radicis jallapir pulverisati
Crystallorum tartari sing. drach. ij
Syrupi spinæ cervinæ q. s. misce.

This electuary, calculated merely to act as a moderate purgative, is among the formulæ of Guy's Hospital.

ELECTUARIUM TEREBINTHINÆ.

R Terebinthinæ vulgaris unc. j Mellis despumati unc. ij misce. This is given at St. Bartholomew's Hospital in gleets, in the dose of a dram twice or thrice a day.

EMBROCATIO ALUMINIS.

R. Aluminis drach. ij
Aceti,
Spiritus vinosi tenuioris sing. lib. ss.

The alum is to be dissolved in the vinegar and the spirit afterwards added.

This is an admirable remedy for chilblains, and also in some diseases of the knee and other joints; in all which cases, the proper mode of applying it, is by means of linen rags kept wet on the diseased part.

EMBROCATIO AMMONIÆ.

Pk Embrocationis ammoniæ acetatæ cum sapone unc. ij

Aquæ ammoniæ puræ drach. ij misce.

This is an excellent application to sprained or bruised parts where the inflammation has subsided. By augmenting the quantity of aqua ammoniæ puræ, it may be rendered as stimulating as need, in any case, be required.

EMBROCATIO AMMONIÆ ACETATÆ CAMPHORATA.

R Solutionis saponis cum camphora, Aquæ ammoniæ acetatæ sing. unc. j Aquæ ammoniæ puræ unc. ss misce.

This is the celebrated remedy sold under the name of Steers's Opodeldoc.

It is of great use in sprains, particularly after the inflammation and tumefaction, which usually take place, have been subdued by other means. It is also applicable, in various other cases, where it may be requisite to stimulate the skin. The simple solution of soap is sometimes preferable to that with camphor, which is liable to produce an uneasy sense of heat in the part affected.

EMBROCATIO AMMONIÆ ACETATÆ CUM SAPONE.

R. Aquæ ammoniæ acetatæ Solutionis saponis sing. unc. j misce.

This is a suitable application to bruised, sprained, or tumefied parts, where inflammation is present.

EMBROCATIO CANTHARIDIS CUM CAMPHORA.

R Tincturæ cantharidis
Spiritus camphorati sing. unc. j. misce.

This embrocation is much in use at Edinburgh, as a topic, in the rheumatism, and likewise in such surgical cases as are to be benefited by stimulating the skin.

In the use however of this, or indeed any external remedy in which cantharides are included, there is a possibility of the latter being absorbed and producing strangury.

EMPLASTRUM AMMONIÆ.

Rx Saponis drach. ij Emplastri lithargyri unc. ss Ammoniæ muriatæ drach. j.

The litharge plaster and soap are to be melted together, and when nearly cold, the sal ammoniac, finely powdered, is to be stirred in.

This is the volatile plaster of Dr. Kirkland, and may justly be deemed one of the best compositions of the kind that has hitherto been invented. The alkali of the soap entering gradually into combination with the muriatic acid of the salt, disengages the pure volatile alkali, which acts continually on the part affected; stimulating the absorbents, and thus proving of service in chronic enlargement of the joints, or what have been called cold tumours. Hence, in some scrofulous affections of the knee or elbow-joints, it is of very great service; but

more particularly in the cure of those gelatinous swellings which frequently form on the olecranon.

Where the skin is particularly delicate or irritable, it may be necessary to diminish the proportion of muriated ammonia, perhaps to one half the quantity, otherwise the plaster may vesicate the part. It may also be necessary to add, that unless it be prepared at the time of application and the ingredients compounded in the order abovementioned, the whole intention will be frustrated.

EMPLASTRUM AMMONIACI CUM CI-CUTA.

R Ammoniaci gummi-resinæ unc. iij Succi cicutæ spissati drach. ij Aquæ lithargyri acetati drach. j.

The ammoniac is to be dissolved in a sufficient quantity of vinegar of squill, after which, the remaining ingredients are to be added, and the whole boiled slowly to the consistency of a plaster.

This is reckoned a useful application to indurated tumours, particularly of the scrofulous kind.

EMPLASTRUM AMMONIACI CUM HYDRARGYRO. (L)

R Ammoniaci colati lib. ss Hydrargyri purificati unc. iss Olei sulphurati drach. j. vel q. s.

The quicksilver is to be extinguished in the sulphurated oil, and then gradually added to the ammoniac, which should be previously melted.

This plaster is designed as an application to indurated glandular tumours, with a view of dispersing them.

EMPLASTRUM BRIONIÆ COMPOSITUM.

Radicis brioniæ in pulverem triti unc. ij Florum sulphuris unc. j Hydrargyri cum sulphure drach. iij Galbani colati unc. iv Emplastri ceræ compositi unc. ix Olei olivæ unc. j.

The three last ingredients being melted together, the powders are to be stirred in.

This is one of Boerhaave's plasters, and on account of its singular composition, may require some apology for its introduction here. But it is said to have been employed by the late

Mr. Pott, and is at this time adopted in the practice of several eminent surgeons, who find it a beneficial application to scrofulous indurations in particular.

EMPLASTRUM CANTHARIDIS. (L)

R Cantharidum lib. j
Emplastri cerælib. ij
Adipis suillæ præparatælib. ss.

The wax plaster and lard being melted and suffered to become nearly cold, the powdered flies are afterwards to be added.

The intention of this plaster is universally known.

EMPLASTRUM CERÆ COMPOSITUM. (L)

R Ceræ flavæ Sevi ovilli præparati sing. lib. iss Resinæ flavæ lib. ss.

These are to be melted' together and strained through a coarse cloth.

This plaster possesses a convenient degree of adhesiveness, and is moderately stimulating. Its chief use is to apply after the removal of a blister, when it is meant to encourage a discharge from the part.

EMPLASTRUM CERUSSÆ.

R Olei olivæ unc. xiij Ceræ flavæ unc. iiss Cerussæ unc. x.

The oil and wax being melted together, the ceruse is to be added, and the whole boiled to the consistence of a plaster.

This was used by Mr. Sharp, as an application to diseased knees, under the name of emplastrum nigrum.

Dr. Kirkland uses, for the same purpose, the red lead plaster of the old Dispensatory, boiled till it assumes a dusky brown colour, under the name of emplastrum de minio fuscum.

EMPLASTRUM CUMINI. (L)

R Seminum cumini
Seminum carui
Baccarum lauri sing. unc. iij
Picis burgundicæ lib. iij
Ceræ flavæ unc. iij.

The burgundy pitch and the wax being melted together, the other ingredients, powdered, are to be mixed with them.

This is a suitable application to encysted and other tumours which suppurate imperfectly.

EMPLASTRUM EUPHORBII.

R Picis Burgundicæ unc. iv Euphorbii drach. ss Terebinthinæ vulgaris q. s.

The Burgundy pitch being melted, the euphorbium, in fine powder, is to be added, and as much of the turpentine as is required to make the whole of a due consistence.

Its properties being those of a powerful stimulant, this plaster is calculated to relieve diseases of the hip joint in their early stage, and with that view, it has a place among the formulæ of Guy's Hospital.

EMPLASTRUM EX EUPHORBIO.

R Emplastri lithargyri lib. iiss Euphorbii unc. iij Picis Burgundicæ unc. ss.

The euphorbium, finely powdered, is to be beaten with a little oil in a mortar, and afterwards added to the other ingredients, previously melted.

Cheselden lays great stress on the good qualities of this plaster, which, he says, greatly exceeds the celebrated plaster of Paracelsus (Emplastrnm lithargyri Paracelsi) for promoting the suppuration of sluggish abscesses.

EMPLASTRUM LADANI COMPOSI-TUM. (L)

R. Ladani unc. iij
Thuris unc. j
Corticis cinnamomi, in pulverem triti,
Myristicæ olei expressi sing. unc. ss
Olei menthæ sativæ drach. j.

To the melted frankincense add the ladanum previously softened by the fire. Next join the expressed oil of nutmeg, and lastly, the cinnamon with the oil of mint, and stir them together in a warm mortar.

It is necessary to keep this plaster in a close vessel on account of the volatility of part of its ingredients. Its use is to promote the suppuration of inactive tumours.

EMPLÁSTRUM LITHARGYRI. (L)

R Lithargyri lib. v Olei olivæ cong. j.

These are to be boiled together, with the addition of a quart of water, till the oil and litharge are incorporated.

It will be necessary to stir the mixture continually, and to add a little boiling water now and then, to supply the place of that which evaporates during the process. The qualities of this well known composition need no description.

EMPLASTRUM LYTHARGYRI BUR-GUNDICUM.

R Emplastri lithargyri lib. j Picis Burgundicæ unc. ss.

These, when melted together, form the sticking plaster of Mr. Cheselden.

EMPLASTRUM LITHARGYRI COMPO-

R Emplastri lithargyri lib. iij Galbani colati unc. viij Terebinthinæ vulgaris drach. x Thuris unc. iij.

The galbanum being melted over a slow fire, with the turpentine, the frankincense, powdered, is to be added, and lastly, the litharge plaster previously melted.

This is the composition heretofore known by the name of diachylon with the gums. It is commonly employed to encourage the suppuration of boils and other small abscesses; but stimulating applications are improper where there is already much inflammation.

EMPLASTRUM LITHARGYRI CUM HYDRARGYRO. (L)

R Emplastri lithargyri lib. j Hydrargyri purificati unc. iij Olei sulphurati drach. j vel q. s.

This is to be prepared in the same way as the ammoniac plaster with quicksilver, whose properties also it very nearly resembles.

EMPLASTRUM LITHARGYRI CUM RESINA. (L)

R Emplastri lithargyri lib. iij Resinæ flavæ lib. ss.

The resin is to be pulverized and gradually stirred into the melted litharge plaster. This is the adhesive plaster in common use.

Mr. Baynton, of Bristol, employs the same ingredients in different proportions, namely, four ounces of litharge plaster to half a drachm of resin; and to this plaster he assigns a very important use in the treatment of old ulcers which appear to be curable by no other means. He directs it to be spread sparingly upon slips of thin porous calico, and applied in opposite directions to the surrounding skin; which being

drawn inwards at each successive dressing, the edges of the ulcer gradually approximate, till at length a sound and permanent cicatrix is produced.

In aid of this application he employs a bandage of calico, which is wetted from time to time with cold water. From the latter, considerable benefit arises, in consequence of its abating inflammation, giving the bandage a greater and more uniform elasticity, softening the callous edge of the ulcer, and relaxing the adjacent skin.

In his Treatise on this subject, instances are produced, of ulcers, which, after existing many years, were cured by these means (even under circumstances highly unfavourable to the patient) in a few weeks, and that without rest or any restraint of diet.

EMPLASTRUM LITHARGYRI PARA, CELSI.

Re Olei olivæ lib. j
Ceræ flavæ lib. iss
Lithargyri lib. ij
Thuris
Masticis
Myrrhæ sing. unc. iiss
Minii unc. iij
Camphoræ unc. ss.

3 3 The oil, wax, and litharge, being properly incorporated over the fire, the other ingredients are to be added successively, except the camphor, which being previously dissolved in a little oil, must be withheld till the plaster is rather cooled.

This is the *emplastrum sticticum* of Paracelsus; an obsolete composition indeed, but still in use with some practitioners of eminence, particularly Dr. Kirkland, who gives it a preference to any modern formula of a similar nature.

EMPLASTRUM OPIATUM.

R Emplastri lithargyri lib. iiiss
Picis aridæ unc. iiss
Ceræ flavæ lib. ss
Opii unc. iv.

The three first ingredients being melted together, the opium, finely powdered, or in the state of a very soft extract, is to be stirred in.

Mr. Cheselden was the inventor of this plaster, which he recommended to be applied to bruised parts and other painful tumours: Dr. Kirkland uses a plaster similar also to this, with the addition of camphor and muriated ammonia.

EMPLASTRUM PICIS COMPOSITUM.

R Picis aridæ unc. viij
Ammoniaci
Galbani sing. unc. iv
Radicis pyrethri
Seminum sinapi
Camphoræ sing. unc. j.
Olei terebinthinæ q. s.

The three first ingredients being melted together, the pellitory, mustard-seed and camphor, previously powdered, must be added, and as much oil of turpentine as will make the whole of a due consistence.

This application is to the full as stimulating as the euphorbium plaster, and possesses similar properties.

EMPLASTRUM RESINÆ CUM CAM-PHORA.

R Resinæ flavæ drach. iij Camphoræ drach. j.

The resin and camphor are to be separately powdered, and mixed together. When used, the mixture is to be sprinkled on leather, and softened by a spatula very moderately heated.

A plaster so prepared, is exceedingly well

calculated to promote suppuration in languid buboes, or abscesses of any kind. In some cases, it may be advisable to add a little soft opium, which improves its consistence, whilst it imparts some sedative qualities.

As the composition of this plaster rests on the solvent properties of camphor described by Dr. Percival, it will no doubt occur to practitioners to join that article with various other resins, by which this class of plasters may be augmented with many useful formulæ.

EMPLASTRUM SAPONIS. (L)

R Saponis lib. ss Emplastri lithargyri lib. iij.

These are to be melted together, and boiled to a proper consistence.

This plaster, as a mild discutient, is deemed a useful application to tumours of various kinds.

EMPLASTRUM SCILLÆ COMPOSI-TUM.

R. Galbani
Ammoniaci sing. unc. ss
Opii drach. j
Aceti scillæ unc. iij
Saponis unc. ss
Emplastri lithargyri unc. ij.

The galbanum, soap, and litharge plaster are to be melted together. The opium, vinegar of squill, and ammoniac, being also mixed together, are to be added to the former ingredients, and the whole continued over the fire and stirred till they are perfectly incorporated.

This is a useful application to indolent tu-

mours.

ENEMA NICOTIANÆ.

R Herbæ nicotianæ siccæ drach. ij Aquæ ferventis lib. j.

The tobacco is to be infused in the water for the space of ten minutes.

This is the tobacco-glyster of St. Bartholomew's, and is employed, in cases of strangulated hernia, to effect a reduction of the protruded intestine. It acts by exciting nausea and by depressing the living power in the system, which it sometimes does to an alarming degree. This form of administering tobacco is equally efficacious, and less indeterminate as to the dose, than the employment of it by way of smoak, which is in use with many practitioners.

ENEMA OLEI CUM OPIO.

R Olei olivæ unc. iv Tincturæ opii gutt. xl ad lx misce. This is employed at St. Bartholomew's Hospital for the same purposes as the enema opiatum.

ENEMA OLEOSUM.

R Decocti avenæ lib. j Olei olivæ unc. ij misce.

This is a convenient common glyster to be used in peritoneal inflammation, and other cases where the principal intention is to foment the abdominal viscera through the medium of the intestines. When this is attempted, it is material to throw up as large a quantity as possible, and that in a very gradual manner, otherwise the intention will not be answered, as the glyster will be returned too quickly. This indeed is worthy of observation in all cases where we administer glysters, as the end is very liable to be defeated by the reaction of the intestine, a natural and uniform consequence of its being too suddenly distended.

This formula, with the addition of an ounce of vitriolated magnesia, makes an eligible purg-

ing glyster.

In cases of fistula, where the gut is much irritated, Mr. White of Manchester orders melted hog's lard to be used as a glyster.

ENEMA OPIATUM.

R Mucilaginis amyli lib. ss Tincturæ opii drach. j misce.

The opiate, in this case, may be augmented according to circumstances. This is a desirable remedy in many surgical cases, but more particularly in spasmodic affections of the neck of the bladder, and in that distressing sense of weight and uneasiness when the prostate gland is affected in a gonorrhœa,

ENEMA TEREBINTHINÆ.

Rx Terebinthinæ vulgaris unc. ss Ovi unius vitellum Decocti avenæ lib. ss.

The turpentine being first incorporated with the egg, is to be added to the gruel.

This is the form employed at Guy's Hospital, except that, for the sake of greater simplicity, oatmeal gruel is here substituted for the decoctum pro enemate. This glyster is generally used, and with great good effect, in violent fits of the stone.

FOMENTUM AMMONIÆ MURIATÆ CAMPHORATUM.

R Fomenti communis lib. ij Ammoniæ muriatæ unc. j Spiritus camphorati unc. ij.

Whilst the fomentation is hot, the muriated ammonia is to be dissolved in it, and the camphorated spirit added at the instant of its being employed.

This fomentation is proper for old sluggish ulcers, with a view of exciting a healthy action

in them.

FOMENTUM CICUTÆ.

Half a pound of the leaves of hemlock fresh gathered, or three ounces, if dried, are to be boiled in three pints of water to a quart.

This is commonly used to foment cancerous or scrofulous ulcers, previous to the application of the cataplasma cicutæ. At St. Bartholomew's Hospital, a pint of fluid is prepared with only two ounces of the fresh leaves.

FOMENTUM FLORUM CHAMÆMELI.

R Florum chamæmeli unc. ij Aquæ ferventis lib. iv. The flowers are to be added to the water, and the boiling continued for a short time; after which, the liquor is to be strained.

This is adopted in preference to that more complicated formula of the College, the decoctum pro fomento, because there can be little or no good done by any of the medical ingredients. At St. Bartholomew's Hospital, chamomile and linseed are used.

FOMENTUM GALLÆ.

R Gallæ contusæ unc. ss Aquæ ferventis lib. ij.

These are to be macerated for an hour, and the liquor strained off.

The principal use of this astringent fomentation, is in the prolapsus ani. It is however of considerable use in the treatment of hemorrhoids and in the fluor albus, in which cases it should be applied cold. It is one of the formulæ of Guy's Hospital.

FOMENTUM PAPAVERIS ALBI. R. Papaveris albi exsiccati unc. iv

Aquæ puræ lib. vj.

This is the anodyne fomentation of Guy's Hospital. The poppies, after having been bruised,

are to be boiled till there only remains a quart, which is to be strained, and the liquor pressed out from the remaining poppies.

This remedy is highly serviceable in assuaging extreme pain in inflamed or ulcerated parts; and also affords very material relief in violent cases of ophthalmia.

GARGARISMA ACIDI MURIATICI.

R Acidi muriatici gutt. xxx Mellis rosæ unc. ij Decocti hordei unc. vj misce.

This gargle also is employed at Guy's Hospital, in common cases of inflammation or ulceration of the throat.

GARGARISMA ÆRUGINIS.

R Oxymellis æruginis unc. ss Mellis rosæ unc. ij Decocti hordei unc. iiiss misce.

This gargle is occasionally prescribed at Guy's Hospital for foul ulcers of the mouth or throat.

GARGARISMA ALUMINIS.

- R. Aluminis scrup. ij Infusi rosæ unc. vj Mellis rosæ unc. j misce. This gargle, included in the formula selectae of Dr. Saunders, is calculated for ulcerations in the throat, gums, &c. and is of service in relaxation of the uvula, and other cases requiring the topical use of astringents.

GARGARISMA HYDRARGYRI MURI-ATI.

R Decocti hordei lib. j Liquoris hydrargyri muriati gutt. v Mellis rosæ unc. ij misce.

This is a suitable gargle for venereal ulcers in the throat, and seldom fails of rendering the patient very essential service.

GARGARISMA MYRRHÆ.

R Tincturæ myrrhæ unc. ss Mellis rosæ unc. iss Aquæ calcis unc. vj misce.

Small ulcerations within the mouth or fauces are very properly treated with this gargle. Small pieces of lint may, on some occasions, be dipped into it and applied to the sore with advantage.

GARGARISMA PYRETHRI.

R. Pyrethri contusi unc. ss Aquæ distillatæ lib. j. These are to be boiled till there remains only half the fluid; to which, when strained, two drams of aqua ammoniæ are to be added.

This gargle is in use at St. Bartholomew's

Hospital.

GARGARISMA ROSÆ.

R. Conservæ rosæ rubræ unc. iij Aquæ bullientis lib. j Acidi vitrioliei diluti drach. ij.

After the conserve has been infused in the hot water about an hour, the vitriolic acid is to be added, and the clear liquor strained off.

This is recommended by Mr. Kendrick of Warrington, as a gargle for common purposes; and is indeed much preferable to the *infusum* rosæ of the College, which is often employed by practitioners as a gargle.

GLACIES.

Ice has been, of late years, much in use, as the medium by which a great degree of cold may be communicated to any part of the body with which it can be immediately or nearly placed in contact.

The known property of cold in subduing inflammation, and also of causing contraction in blood vessels, has accordingly rendered it an important remedy in strangulated hernia and in hæmorrhage, which are the two principal uses to which it has been applied.

In both cases it is pulverised and heaped upon the part, and renewed as fast as it dissolves. Its use in the former has been carried so far as even to destroy the skin and occasion a subsequent sloughing; but this seldom happens, and when it does, is no objection to its use, which very frequently will cause the retreat of the gut, with very little manual assistance, after every other method has failed.

For burns and scalds the application of ice is said, by Sir James Earle, to be extremely beneficial; and especially as it may be laid on parts of the body which cannot conveniently be immersed in cold water, as the face, neck, &c.

He relates a case in which cold water alone was applied with complete success: the patient, during several days, drank nothing else; took very little nourishment; and though the pain often recurred at short intervals, and some blisters arose, a perseverance in this cooling plan not only procured ease, but, in little more than a week, effected a cure. Nor was any scar left; though the hands, face, and neck had been "miserably burnt," by the bursting of a bottle of flaming spirits of wine.

Sir James Earle's reasoning on this practice,

however, is ably disputed by Mr. Kentish; who recommends a practice diametrically opposite to this. See Linimentum terebinthins.

HAUSTUS AMMONIÆ ACETATÆ.

R Aquæ ammoniæ acetatæ unc. ij Syrupi papaveris albi unc. ss misce.

This will be found a useful draught in all cases where the views of surgery are to be promoted by producing a gentle diaphoresis, and where the use of opium and more powerful sudorifics are inexpedient.

HYDRARGYRUS.

A correct knowledge of this remedy and of its modus operandi are matters so truly important to every surgeon, that, previous to the formulæ in which its various preparations are exhibited, we are led to insert the following account of mercury given by the celebrated Cullen.

"In considering the operation of mercury in general," says he, "the first question that occurs, is, whether it operates on the fluids or solids; as dissolving the former, or as a stimulant to the latter, exciting the respective secretions of those to which it is applied?

"The former is the common supposition. That opinion, in the first place, has been sup-

ported by arguments à priori. 1. It has been said, that it acts from its specific gravity, its great momentum in the mass of blood breaking down its texture. But to me this is not at all satisfying; for, first, it is proved by chemistry, that mechanical force never divides mixts, but only aggregates. Our vessels, indeed, whose action may be supposed mechanical, seem to have some such power; but then this is from increasing the cohesion, but not altering the mixture. 2. Supposing such effect could take place from mere mechanical force, that here is not sufficient; for any body reduced to so great tenuity as to swim in a fluid, will have, in proportion to its greater tenuity, the ratio of its superficies to the quantity of matter so increased, as not to be able to overcome the resistance. Thus the most ponderous gold can be so minutely divided as not to be able to overcome the cohesion of water or spirit of wine, but to be suspended in them; so that much less can mercury be supposed to alter the cohesion of our blood. 3. Supposing the force of mercury capable to break down our blood, the quantity, even the greatest we can suppose to be introduced, will not have the effect, so that every thing said on the mechanical action of mercury on the fluids is without foundation.

Secondly. "Those who allege that mercury

acts on the fluids, suppose it acts by a septic power. The proofs brought are, the remarkable fætor of the saliva, the tumid flaccid gums, and the blood ready to flow out from them. arguments seem very specious. Again, say they, experience shews that mercury is hurtful in the scurvy. With respect to its effects in the scurvy, that 'may depend on its irritation and stimulus, and all other stimulants have the same effect in aggravating scurvy. As to the fœtor of the saliva, possibly it may have the power of producing that, but not of extending putrefaction over the system. But the fætor can be produced without mercury, and there is no instance of an increased secretion being kept up for any length of time, without the same symptoms occurring. This accounts for the other effects in the mouth, which arise evidently from the putrid saliva; for no one instance is alleged of a scorbutic putrefactive taint taking place in any other part of the system. There is no alteration in the blood during a salivation, and its viscidity appears then as strong as at any other time. Salivation is attended with an inflammation, and the blood shews an inflammatory crust, which, indeed, may be said to be a symptom of the scurvy; but then, if we examine it, we find it denser than it appears in that disease. Again, after the operation of mercury is over, no taint

appears in the blood, but, on the contrary, the person is in better health than before, and gives marks of a firmer state of it.

"From what has been said, I would conclude, though not certainly, that mercury acts neither by its mechanic nor septic powers. We have proved at least that it is not septic in the mass of blood; but if it be so, only as collected in the secretories. But though we should allow mercury in a considerable quantity to have somewhat of a septic power, yet in the ordinary dose in which we exhibit it, it can never have that effect. In the case of unction, that indeed may be denied; but we have many instances of one-twentieth part of a grain of some preparations of it, taken internally, having the same effect as some ounces by unction.

"All this will be farther confirmed by the arguments we can bring for the action of mercury being as a stimulant. All its effects may be explained from this supposition. From its stimulus in the stomach it proves emetic; and carried into the intestines, it is purgative from the same quality; into the blood, diuretic and diaphoretic; and, in short, like other evacuants, a very general stimulus. Other arguments for its action as a stimulant are, that it never acts but in an acrid condition, discoverable by its metallic cupreous taste in the mouth; that a

salivation can be excited by its external application to the salivary glands; that its effects are alway accompanied with some degree of fever and inflammation; that its effects in ulcers are plainly derived from its stimulant powers producing that degree of inflammation necessary to the being of good pus, and that it produces these effects much better by external application than internal exhibition. In proportion as these proofs of the stimulant power of mercury are convincing, they weaken all others that may be alleged for any other method of action.

"This reasoning is somewhat connected with another question, viz. Why mercury is more particularly and naturally determined to go by the salivary glands? The fact is certainly true, and more so of this than of any other acrid acting by a common stimulus. Those who talk of its mechanical power say, that the more ponderous parts of the blood keeping the axis of the canal, and the course of the blood, from the left ventricle to the head, being more in a strait line than in the descending aorta, that therefore the more ponderous and solid parts will be determined thither. I would allege, that this hypothesis is not supported by anatomy; for the aorta suffers a curvature before it gives off the carotids, so that the heavier moleculæ must be reflected into this curvature, and consequently the reasoning must be groundless which is built on the contrary supposition. Another supposition is, that mercury breaks down the blood to the size which fits it for passing off by the salivary glands; but this is very difficult to suppose, and entirely hypothetical: much rather may we say, that mercury goes chiefly to the glands, from a certain attraction to the liquor of the salivary glands, in the same manner as neutrals, by an alliance to the watry parts of the blood, are concentrated in the kidneys. The nature of the saliva and of may other of the secreted fluids is not known. I would allege Fordyce's experiments, that it comes nearer to the mucus than has been imagined. This uncertainty with regard to the saliva, prevents my endeavouring to go farther to give the reason why mercury is particularly related to that liquor. Upon the whole, mercury appears a very universal stimulant, and general evacuant, being emetic, cathartic, diaphoretic, and salivatory, and accordingly we find it one of the most universal aperients and deobstruents with which we are yet acquainted.

"Thus much we have thought proper to say with regard to the general operation of mercury. We shall now proceed to talk of the preparations of mercury, as in these the effects are di-

versified.

"With regard to the use of the preparations in practice, crude mercury, and the combination in

cinnabar and æthiops mineralis, to which may be added the athiops antimonialis, in so far as it contains mercury, can only by accident, or indirectly, prove medicines. All the others are not only active but powerful; the only distinction, however, seeming to be, that of being more or less acrid. How to determine their difference in that respect is not easy. It is commonly supposed that mercury, triturated with turpentine and honey, is one of the mildest preparations, and that every addition, as well that by acid, as the fire, gives additional acrimony. The preparations by triture are very apt to be imperfect, and I maintain they are more active as longer triture is bestowed. Hence I should imagine, that if mercury in this way were properly divided, the preparation might prove equally acrid with the precipitate per se. As prepared in the shops, the strength of this medicine is very imperfect, and uncertain. Generally no other test is sought of the preparation's accuracy, but the blackness and disappearance of the particles. Although they disappear at present, upon standing they very frequently are collected, and re-assume their form, and therefore, after having obtained the foregoing tests, we should let the ointment stand for a day, and use the assistance of a glass, to see if any collected globules can be discovered.

"Mercury united with the vegetable acid, as in Keyser's *Drassia*, should be one of the mildest preparations. The preparations of mercury with the nitrous acid are milder than those with the vitriolic, and these again less acrid than the muriatic preparations.

"All these differ in their operation as that is extensive or partial. Taken into the stomach, they shew their effects by producing sickness and pain, and sometimes go the length of-vomiting. This leaves some doubt of the specific stimulus of mercury, which, in opposition to antimony, will often sooner inflame the stomach than prove emetic. Whenever mercury is to be used in that intention, it must be given in a large dose. I do not know whether it is by accident, or design, that the Turbith mineral has been here commonly employed. Given in the dose of half a grain, it acts on the system in general; but in a larger dose, viz. gr. viij. it is said to prove emetic. In less quantity it excites insufferable pain, and must be given so as to operate directly. This Turbith mineral is found to have effects different from any other of the preparations. These will be known from what we shall afterwards say on emetics in general. It is found to resolve swelled testicles, when mercury in other forms has failed: it

also salivates longer than many other of its preparations; but this is not peculiar to it.

"In the intestines, the stimulus of the mercurial preparations is exerted with greater effect, but still it is confined to the part, and mercury acting in this manner is carried off without any farther effects on the system. Mercurial purgatives are seldom employed alone, but in conjunction with other purgative medicines, although I have known small doses of calomel employed with advantage. When we purge, we commonly think we are operating on the common sewer of the system; but little advantage is to be found from mercury employed in this way, as its virtues depend chiefly on its operation on the body in general. As a purgative, the most insoluble preparation of mercury is the best, and therefore calomel is used; but when used in this way we are disappointed if we expect it should exert the other virtues of mercury.

"The great effects of mercury seem to be exerted when it is carried into the mass of blood, and is united in the excretories. A diffusible preparation of it is necessary for this purpose, and advantages arise from the different determinations. Mercury seems to change the whole mass of blood: this it does in three ways, by purging, sweating, and salivation.

" Purging is one of the slowest means. There may be another way than the common of making mercury exert this action, viz. by introducing it into the blood, and then determining it to the intestines. Purging is never excited by any means without spasms of the intestines, which, when the operation is continued, are apt to end in durable spasm and inflammation. These are attended with very dangerous consequences; and neither does the method of purging by unction answer much better, (although perhaps more effectual), because it is attended with very great pain. The method of Douglas is, on this account, now neglected. He followed, in this method, Dessault. Sweating is the easiest operation of mercury that I know, but the difficulty here lies in preventing any of the others from taking place.

"As this of sweating is so diffuse an operation, physicians have been led to employ salivation, which, however, is attended with many inconveniences, as inflammation often to a dangerous degree; and it is the universal consent of practitioners, that they employ only salivation because no other means can be used. If then means be found of exciting copiously, and keeping up a sweat, it should be universally practised. We have now-learned that the most acrid preparations of mercury are most apt to have

this effect, because they will more readily produce that encrease of circulation, on which the encrease of this excretion depends. Here the acrid must be given in smaller quantity than will make it run to the salivary glands. In a great dose, indeed, these preparations are apt to inflame the stomach, and if they go to the salivary glands are more troublesome than others; but where this can be prevented, their operation is much more easy.

"In order to avoid the inconveniences arising from salivation, raised by the acrid preparations, the milder ones should be chosen, and slowly introduced, and that by way of unction. One of the inconveniences of a salivation is, that when mercury is going off by the salivary glands, there are certain means which drive it to the intestines. This must be guarded against; but in a medicine introduced by the mouth there is more danger of this happening, especially as we intend it should be mild, and consequently less soluble; whereas by unction it can be given slowly without that effect; and for the method of exhibition, Astruc's directions are the best. All these various preparations vary according to regimen."

HYDRARGYRUS ACETATUS. (L)

This preparation of quicksilver is reckoned to be the same in effect, as that which enters into

the composition of the celebrated dragées of Keyser; with this difference only, that the latter is the result of a less chymical and much more laborious process.

Formed into pills with the crumb of bread, the dose is from a single grain to five grains

every night.

HYDRARGYRUS CALCINATUS. (L)

In this preparation the quicksilver is reduced to the state of a calx, by exposure to a continued heat. It is the simplest, yet perhaps the most efficacious of any of the chymical preparations of quicksilver.

The dose is from half a grain to two grains every night.

HYDRARGYRUS CUM CRETA. (L)

This preparation has many strenuous advocates, whilst others, of no inconsiderable authority, maintain that it is inert, and incapable of producing any effect whatever on the system. Among the latter is Dr. George Fordyce. Sir J. Earle however is in the habit of employing it in the cure of venereal ulcers, and with success; and there is no doubt, but it possesses a considerable degree of efficacy in the cure of diseases of the prostate gland.

The usual dose is from five to ten grains

every night, formed into a bolus with syrup or conserve.

HYDRARGYRUS MURIATUS. (L)

This is a remedy of very extensive utility in surgery. Like the preparation last mentioned, however, it has been denied the properties of an antisyphilitic, particularly by the late Sir John Pringle, who, notwithstanding, allows it considerable merit in removing particular symptoms. The testimony of Van Swieten and others in its favour, may indeed be opposed to this; but it is certainly possessed of too much activity, to merit a preference to those other preparations of quicksilver, that produce the mercurial effect with less injury to the primæ viæ.

HYDRARGYRUS MURIATUS FORTIOR.

R Calcis hydrargyri albæ unc. ss Acidi muriatici q. s.

The calx being put into a flask and afterwards placed in sand of a moderate heat, as much of the muriatic acid is to be poured upon it as will dissolve it. When this is effected, a quantity of distilled water is to be added, and the heat afterwards continued till as much of the fluid is evaporated, as may be necessary to enable the remainder to form crystals, when set, for that

purpose, in a cool place. These are afterwards to be taken out and preserved for use.

This is the mercurius solutus, of Cullen; who, speaking, in his chymical writings, of mercurial preparations rendered acrid, or kept so, says, "These are rendered more acrid by redissolving the precipitates. When mercury is precipitated from any of the fossil acids by alkalis, it is soluble in the vegetable acid. I have precipitated mercury from the nitrous acid, by means of fixed alkalis, and again dissolved it in the muriatic, and from thence obtained it in crystals. This is a pretty accurate preparation; one grain of this I dissolved in an ounce of water, and gave twenty drops of it for a dose, so that supposing this grain contained one third of mercury, which seems to be the case, this one third dissolved in an ounce of water, or four hundred and eighty drops, these twenty drops could only contain 20 of one third of a grain of mercury. This shews the great addition of power that mercury acquires by being joined to acids."

It has been suspected, that this active mercurial is the chief ingredient in Velno's regetable syrup.

HYDRARGYRUS MURIATUS MITIS. (L)

This preparation has heretofore gone under the name of Scheel's calomel. It will occasionally succeed in syphilitic cases, when other prepara-

tions of quicksilver have proved ineffectual, and may be administered in the dose in which the hydrargyrus muriatus is usually given.

HYDRARGYRUS NITRATUS RUBER. (L)

This remedy is well known as an escharotic, but its extraordinary activity does not allow of its being given internally. When finely levigated and joined with terebinthinate applications, it is of great service in exciting healthy granulations in scrofulous sores, and ulcers mali moris.

There is no better caustic application than this to venereal shankers.

HYDRARGYRUS PHOSPHORATUS.

This is a new and powerful remedy in the secondary stages of syphilis, at least if we may credit the following account of it given in the following of Gotha, No. II.

"The phosphoric acid (say the Editors) enters into no combination with mercury in its metallic state. But if the mercury be previously dissolved in nitric acid, and if the phosphoric acid, in a liquid form, be dropped into that solution, a white precipitate is formed, which is a true metallic neutral salt, consisting of a combination of the phosphoric acid and mercury.

" Although the phosphat of mercury has long

been known as a chymical preparation, yet its practical application has been little, if at all, attempted. Bergman, in his physical and chemical tracts, gives the following directions for preparing this active medicine:-Eight ounces of vitriolic acid are carefully and well mixed with four pounds of water, in a capacious glass vessel; to this mixture must be gradually added fourteen ounces of white calcined bones, reduced to powder. The vessel ought then to be placed in a temperature of about 60° for three days, that it may gently digest; during which time it ought to be frequently stirred with a glass rod. Then the whole should be filtered through fine linen, the fluid part saved in a separate vessel, and the residuum washed in distilled water, till it be completely edulcorated. The liquor contains the phosphoric acid, separated from the bones by means of the vitriolic acid, but in a state not entirely free from gypsum. This liquor must be evaporated to dryness, and the residuum dissolved in the smallest possible quantity of lukewarm water, when a considerable portion of gypsum will remain undissolved. After straining off all the liquor, it must again be diluted with distilled water, and a solution of the purest pot-ash added to it, until it be completely saturated. Thus the small portion of gypsum still held in solution will be decomposed, and some calcareous earth be precipi-

tated, which must be separated by filtration. The liquor then ought to be evaporated to a proper consistence, and exposed in a cool place for crystallization. At first appears a small portion of vitriolated tartar, which originates from the decomposition of the gypsum; but if the liquor be again evaporated, the phosphorated vegetable alkali will be produced in rhomboidal prismatic crystals. These should be again dissolved in distilled water, and afterwards decomposed by a supersaturated solution of mercury, in the nitric acid. The precipitate thus obtained, after having been completely edulcorated, by repeated affusions of warm distilled water, should be slowly dried. By this process, if the directions given be properly attended to, the product will uniformly be the purest phosphat of mercury.

"This extremely active mercurial preparation, however, unless it be administered with great caution, is very apt to produce nausea, violent vomiting, ptyalism, and other disagreeable symptoms, even when taken in doses not exceeding half a grain.—With a view to avoid such accidents, it has been successfully prescribed in the

following formula:

R Hydrargyri phosporati gran. iv

Corticis cinnamomi in pulverem triti

gran. xiv

Sacchari purificati drach. ss. misce.

The whole is to be divided into eight equal parts, one of which is to be taken every morning and evening, unless salivation take place, when it ought to be discontinued. Some patients, however, will bear from one to two grains of the phosphat of quicksilver, without inconvenience.

"This remedy has been observed to heal inveterate venereal ulcers in a very short time, nay, in the course of a few days, particularly those about the pudenda. In venereal inflammations of the eyes, chancres, rheumatisms, and chronic eruptions, it has proved of eminent service. Upon the whole, if used with the necessary precaution, and in the hands of a judicious practitioner, it is a medicine mild and gentle in its operation. The cases, in which it deserves the preference over other mercurial preparations, are these: in an inveterate stage of syphilis, particularly in persons of torpid, insensible fibres—in cases of exostosis, as well as obstructions in the lymphatic system—in chronic complaints of the skin, &c."

To those who have had experience of this new remedy it must be left to decide whether it really merits the encomiums bestowed on it. Perhaps its great activity would be best corrected by opium.

HYDRARGYRUS PRÆCIPITATUS CINEREUS.

No. I.

R. Hydrargyri purificati
Acidi nitrosi diluti sing. part. æq.

The quicksilver is to be dissolved in the nitrous acid and diluted with water; after which, a sufficient quantity of aqua ammoniæ is to be added, to neutralize the acid. The precipitate is afterwards to be well washed and dried.

This is the Edinburgh mode of preparing the grey precipitate first suggested by Dr. Saunders as a succedaneum for *Plenck*'s remedy. The dose is from two to five grains every night.

No. II.

R Aquæ ammoniæ drach. ij Aquæ distillatæ unc. vj Calomelas unc. iv.

The two liquids being first mixed, the calomel is to be thrown in, and the whole agitated together. After the decomposition is completed, the precipitate is to be separated by filtration and dried.

In the treatment of lues venerea by fumiga-

tion, Mr. Abernethy thinks this preparation superior to the red sulphurated quicksilver, on account of its not yielding any vapour offensive to the lungs of the patient. It is, in fact, the same kind of remedy with that recommended by Lalonette; with this difference, that it is cheaper and less troublesome in the preparation. The powder of Lalonette was "a kind of calomel, which, by repeated sublimation from iron-filings, was so far deprived of its muriatic acid, as to be, in part, reduced into running quicksilver; and, while it possessed considerable volatility, was perfectly irritating."

The substitute recommended by Mr. Abernethy contains a good deal of quicksilver in its metallic state, which being extremely volatile, becomes oxydated when raised into fume, and afterwards condenses into a fine white dust, which, if the process of fumigation be properly conducted, applies itself to all parts of the skin, and is quickly taken up by the superficial absor-

bents.

The patient is to be inclosed, naked, in a kind of box, somewhat like a sedan chair, having, above, an opening which encircles the neck, and, at the bottom, another for the reception of a grate and heated iron. The mercurial powder is thrown upon the iron, and after the fumes are entirely dispersed over the patient's body, a flan-

nel dress, which has itself been fumigated, should be put on.

Mr. Blicke employs fumigated stockings and under-waistcoats, with a view to produce mercurial effects, both locally and on the constitution, without the unpleasantness of rubbing in quicksilver ointment. Diseased joints, and sarcomatous enlargements in the breasts of women, have been greatly benefited by this practice; without the patient's being aware of the nature of the application.

HYDRARGYRUS SULPHURATUS RUBER. (L)

The chief and almost only use of this in surgery, is in the administration of quicksilver by fumigation. Thus employed, it has proved exceedingly serviceable in venereal cases. Ulcers and excrescences about the pudendum and anus in women, are particularly benefited by it; and in these cases it is most conveniently applied, by placing a red hot heater at the bottom of a night-stool-pan, and, after sprinkling on it a few grains of the red sulphurated quicksilver, placing the patient on the stool. To fumigate ulcers in the throat, it is necessary to receive the fumes on the part affected, through the tube of a funnel. By inclosing the patient naked in a box, it has, on some occasions, been contrived, to fumigate the

whole of the body at once; and in this way, the specific powers of the quicksilver have been very rapidly excited. (See the preceding article).

This mode of curing the lues venerea, is spoken of in Astruc; and the subject has of late years been revived in a treatise by *Lalonette*, and by Mr. Abernethy in St. Bartholomew's Hospital.

HYDRARGYRUS VITRIOLATUS. (L)

This is the old mercurial remedy, once in very great vogue, called turbith mineral. On account of the roughness of its operation, which is violently emetic, it has been, for the most part, discontinued in practice. When used, it is in doses from one to eight grains.

INFUSUM FOLIORUM BELLADONNÆ.

R Belladonnæ foliorum exsiccatorum drach. ss Aquæ ferventis unc. xij.

To seven ounces of the strained liquor Dr. Saunders directs one of tinct. cardamomi comp. to be added.

This remedy is adapted to the same cases, and must be administered under the same regulations, as the aconitum, cicuta, hyoscyamus, and other vegetables of that class, of which mention is made under the articles succus aconiti spissatus, &c.

Of the above infusion two spoonfuls, three times a day, may be given at the outset.

INFUSUM FOLIORUM LAURI CE-RASSI.

R Foliorum lauri cerassi recentium unc. iv Aquæ bullientis lib. ij Mellis despumati unc. iv.

The leaves are to be infused in a close vessel for one hour, and the honey afterwards dissolved in the strained liquor.

This infusion has been successfully applied by Dr. Cheston, to ulcers of a malignant character. Its effects in one instance of a painful corroding ulcer on the lip, apparently of a cancerous nature, but which healed entirely under its use, were very remarkable.

Fine linen rags, or lint, wet with the liquor, are to be laid on the ulcerated part, and renewed occasionally.

INFUSUM LINI.

Radicis glycyrrhizæ incisæ drach. ij Aquæ ferventis lib. ij.

These are to be suffered to stand near the fire for some hours; stirring the mixture occasi-

onally, in order that the mucilage of the seeds

may be completely dissolved.

This is a useful beverage in the strangury, in cases where a flow of urine is to be promoted, or its explusion facilitated. These purposes will be greatly assisted, by dissolving in the liquor about an ounce of gum arabic, after the infusion has been sufficiently continued to obtain, completely, the mucilage from the linseed.

INFUSUM PIPERIS CAYENSIS.

R Piperis cayensis gran. viij Aquæ distillatæ unc. viij.

The Cayenne pepper being bruised, the cold water is to be poured on it, and suffered to stand, in a close vessel, for three hours, when it is to be filtered through paper.

This has been used with success, at the Liverpool Infirmary, in a gutta serena. Two or three drops are to be conveyed between the eyelids twice a day, and persevered in for a considerable time.

The pain excited by this application is exceedingly violent, and such as requires great resolution in the patient to submit to for a sufficient length of time.

This remedy seems to act much upon the same principle as the stimulating snuffs; but has the advantage of being applied more directly to the part affected.

INJECTIO ACIDI MURIATICI.

R. Aquæ distillatæ unc. iv Acidi muriatici gutt. viij misce.

This is used, with very good effect, in cases of gonorrhœa where the scalding of the urine proves a troublesome symptom. This formula is attributed to the late Mr. Wyatt.

-INJECTIO ALUMINIS.

R Aluminis gran. iv Aquæ rosæ unc. iv misce.

In this and other injections for the gonorrhæa, the proportion of active materials is to be varied according to circumstances, especially in women; who will bear much more powerful remedies of this kind than men.

The above is most suitable in the latter stage of a clap, when the inflammation is at an end. It is best calculated, indeed, for gleets, and such discharges as owe their continuance to a habit which the parts have acquired. To effect a cure in these cases, the habit is to be interrupted, and the remedy continued, notwithstanding the disappearance of the symptoms, for a considerable time.

Roch alum and water, in the proportion of one dram to six ounces, has been successfully employed by Dr. Cheston, as an injection in affections of the rectum, either when the internal coat has been simply-relaxed and disposed to prolapse, or where it was beset with loose fungated tumours. Camphor is of service in the like cases.

The proportion of alum should be increased or diminished according to the greater or less irritability of the part.

INJECTIO AMMONIÆ ACETATÆ.

R. Aquæ ammoniæ acetatæ unc. j Aquæ distillatæ unc. ij misce.

This is suitable in the inflammatory stage of a gonorrhœa. Care should be taken in preparing the water of acetated ammonia, that it be perfectly neutralized, and no more.

INJECTIO CALOMELANOS.

R Mucilaginis seminis cydonii mali unc. iv Calomelanos drach. ss misce.

This differs from Mr. Bromfield's injection, only in substituting mucilage of quince seeds for that of gum arabic.

It is doubtful, whether the calomel has any

share in the good effects produced by this remedy; but the mucilage is a soothing and useful application to the urethra, when inflamed and irritated by the venereal discharge.

At St. Bartholomew's Hospital, an injection of calomel and mucilage of gum arabic, in the

proportions here stated, is employed.

Some practitioners employ calomel and aqua rosæ, one scruple to six ounces, as an injection; but it is difficult to keep the calomel suspended even while the injection is applied.

INJECTIO CERUSSÆ COMPOSITA.

R. Pulveris cerussæ compositi scrup. j Zinci vitriolati gran. vj Aquæ rosæ unc. iv misce.

This is one of the formulæ of the late Mr. Clare, who considered it a very suitable injection in the inflammatory stage of a gonor-rhœa.

INJECTIO COPAIBÆ.

R Balsami copaibæ drach. ij Mucilaginis arabici gummi unc. ss Aquæ calcis unc. iv misce.

This is an astringent injection, and proper in gleets, and in the latter stage of gonorrhœa. It is also a beneficial remedy in the fluor albus.

INJECTIO CUPRI ACETAT

R Æruginis præparatæ gran. x Olei amygdalæ unc iv. misce.

The verdigrise is to be dissolved, by triture, or by a gentle heat, in the oil.

INJECTIO CUPRI AMMONIATI.

R Liquoris cupri ammoniati gutt. xx Aquæ rosæ unc. iv misce.

This is the injection so strongly recommended by Mr. Foot, who considers it preferable to all other remedies of this nature.

INJECTIO CUPRI VITRIOLATI.

Re Cupri vitriolati gran. iv Aquæ distillatæ unc. iv misce.

This, and the foregoing cupreous injections, are to be considered of the astringent class, and calculated for the latter stage of gonorrhoea. Of these however it may be said, no less truly than of all other astringent injections, that the propriety or impropriety of employing them during the existence of the inflammation, depends on the proportion of active materials introduced into their composition; astringents,

in very minute quantity, having the effect of sedatives.

INJECTIO CUPRI VITRIOLATI COM-SITA.

R Cupri vitriolati gran. vj Aquæ puræ unc. iv Aquæ lithargyri acetati gutt. xx.

The vitriolated copper being first dissolved, the water of acetated litharge is afterwards to be added.

These form a turbid mixture, which has an excellent effect in those cases of phimosis, where ulceration is going on within the prepuce. It is to be injected between that part and the glans penis by means of a syringe; and, as its action is, or ought to be, pretty considerable, the repetition of it should depend upon circumstances.

This formula was suggested by the late Mr. Samwell, who, in his practice as a navy surgeon, found it eminently useful.

INJECTIO GALLÆ.

R Fomenti gallæ Aquæ distillatæ sing. unc. ij misce.

This is merely astringent, and suitable only ingleets or in the fluor albus in women.

INJECTIO HYDRARGYRI.

R Hydrargyri purificati drach. j Mucilaginis arabici gummi unc. iss Aquæ distillatæ unc. iss.

The quicksilver is to be extinguished in the mucilage, and the water afterwards added.

The good effects of the quicksilver in this injection are somewhat questionable, though it is a composition preferred by many practitioners.

INJECTIO HYDRARGYRI MURIATI.

R Aquæ distillatæ unc. iv Liquoris hydrargyri muriati gutt. ij misce.

This is an exceeding good injection in any stage of a gonorrhea. Where there is much inflammation it must be weakened, and where that is absent, the proportion of muriated quicksilver may be augmented. Cerussa acetata is sometimes joined with it, but this is no material improvement.

When made sufficiently strong, it is likewise exceedingly assful in promoting the cure of sinusses which cannot be laid open, or which happen to be situated in parts, where the appearance of a cicatrix should be avoided. Its first

effect is to inflame; a thin discharge succeeds, which by degrees thickens, and granulation taking place, the cavity either fills up, or the sides of the fistula at length become firmly united to each other.

INJECTIO HYDRARGYRI ACETATI.

R Aquæ lithargyri acetati gutt. viij Aquæ rosæ unc. iv misce.

This is an injection calculated for almost any period of a gonorrhœa, if the proportion of water of acetated litharge be duly regulated; but it is more immediately suited to the inflammatory stage.

INJECTIO OLEOSA.

R Olei amygdalæ unc. iv Aquæ lithargyri acetati gutt. viij misce.

This is a soothing injection, and calculated to abate inflammation. At the time of its being employed, it should be slightly warmed, in a tea-cup set in hot water.

INJECTIO OPIATA.

R Aquæ distillatæ unc. iv Tincturæ opii gutt. xl misee.

The design of this injection is obvious.

INJECTIO THEÆ.

R Theæ viridis foliorum drach. ss

- Aquæ ferventis unc. iv.

These are to be infused in the common way, and the strained liquor employed as an injection.

It is suitable at any period of a gonorrhœa, but more particularly during the inflammatory stage, when its sedative effects prove highly beneficial.

INJECTIO VINI RUBRI.

R Vini rubri unc. xij Aquæ puræ unc iv misce.

This is the injection recommended by Sir, James Earle in the cure of the hydrocele. If the tumour be very large, he directs it to be emptied and the water suffered to accumulate, till about six ounces are collected. It is then to be tapped in the common way, and as much of the red wine injection, made blood-warm, is to be thrown in through the canula of the trocar, as will distend the tumour to its original size. It is to be allowed to remain there for about five minutes, after which it is to be pressed out,

and, if the subsequent inflammation prove considerable, a common poultice is to be had recourse to. It appears, from experiments made by other practitioners, that the cure in this case is less to be attributed to the materials which compose this injection, than to the mere circumstance of suddenly redistending the sack: air, the water of the hydrocele, and other liquids, having succeeded equally well when this circumstance has been attended to *.

* Dr. Donald Monro, in a note p. 141, of his Essay on the Dropsy, published in 1755, speaks of this mode of radically curing the hydrocele, in the following terms: " Mr. Monro, surgeon to Lord Hume's regiment, taking the hint from the method proposed by my father (Professor Alexander Monro of Edinburgh) of curing the hydrocele, by raising a small degree of inflammation, attempted to make a radical cure in the following manner. After having let out the water of a. large hydrocele, that had been often tapped, he injected a little spirit of wine into the scrotum, which raised so violent an inflammation as to bring the 'patient into great danger, but by bleeding him very freely, he was at length relieved of it. His patient recovered, and has never since had a return of the hydrocele. This violent inflammation which the ardent spirits brought on in this patient, induced him to try a milder remedy in the next case that offered; when, having let out the water, he injected some claret into the scrotum, by which means only a slight degree of inflammation was raised, but it succeeded to his wish by completing a cure; since which time he has made several radical cures by this remedy alone."

INJECTIO ZINCI VITRIOLATI.

R Zinci vitriolati gran. x Aquæ distillatæ unc. iv misce.

This is the injection preferred, and not undeservedly, by the late Mr. Clare. Many who have made extensive trials of the various substances employed as injections in the gonorrhæa, have decided in favour of the solutions of vitriolated zinc.

Of all injections, however, it may truly be said, that they are not equal in their effects, even in cases where the circumstances under which they are used, appear to be similar. Hence the necessity of that variety of formulæ which have been introduced into practice.

KALI AERATUM.

and the second of the second

R Kali præparati unc. ss Aquæ distillatæ drach. v. Ammoniæ præparatæ drach. j.

The kali being dissolved in a water-bath, the prepared ammonia is to be added, and when the effervescence is at an end, the mixture is to be set by to crystallize.

This is in use at St. Bartholomew's and other hospitals, as a lithontriptic. It is given in the dose of two drams, dissolved in a pint of distilled water, twice a day.

KALI ARSENICATUM.

R Arsenici albi Nitri purificati sing. unc. j.

These being powdered and mixed together, are to be placed in a sand-bath, the heat of which is to be gradually augmented, until the vapours cease to issue from the mouth of the retort. The mass is then to be dissolved in four pounds of boiling distilled water, which is afterwards to be evaporated, and the residue set aside to chrystallize.

This is one of the formulæ of St. Bartholomew's Hospital, where these crystals are given in the dose of one fifth of a grain, three times a day. It resembles, in its properties, the remedy proposed by Dr. Fowler, for which, see solutio arsenici.

KALI PURUM. (L)

This is a most powerful caustic, and perhaps the most useful, for that reason, of any employed in surgery. It acts immediately on being applied to a living part, and in that respect, has the advantage of those substances which require to be applied for a length of time, and whose action of course, is left more to accident. In the state directed by the College, it has a disposition to liquify, which is exceedingly inconvenient; but it has been improved in this respect by a species of adulteration practised by the chemists, who introduce a small proportion of unslacked lime in fine powder, and thus give the sticks into which it is formed, a suitable degree of solidity.

Its principal use is for opening abscesses and venereal buboes, and the mode of applying it is as follows. The caustic, being slightly moistened at the end with a little water, it is to be rubbed on the thinnest, most prominent, and most depending part of the tumour. Its immediate effect will be to destroy the skin, which is to be removed, and the farther operation of the caustic encouraged by continuing the friction in various directions. By a little management of this sort, the living parts may be successively brought into contact with the caustic, so that, at length, a complete opening may be effected. This however being a process of some severity to the patient, and the immediate discharge of the matter of an abscess seldom if ever requisite, it will be found sufficient to rub the part with the caustic three or four times in the manner described, and afterwards cover the eschar with a small bit of lint, which may either be confined by an adhesive plaster or by a common poultice. In two or three days, the dead portion will begin to slough, and the matter will find a gradual outlet at the edges. Some caution is necessary to confine this application to as small a point as possible, on account of the disposition of the kali to act laterally. For this reason it should rather be twirled between the finger and thumb, than employed with a circuitous motion of the hand.

That the practice of opening buboes by the application of caustic, should be preferred by the patient as well as the surgeon, the following fact, related by the late Mr. Hunter, is a sufficient proof. "I once opened two buboes (says he) in the same person, one immediately after the other. The first was with kali purum, which gave him considerable pain, and therefore he would have the other opened with a lancet, as the pain would only be momentary. But it was so great, and the soreness continued so long, while there was no pain in the other, deadened by the caustic, after it had done its business; that next day he said if he was ever obliged to have one opened again, it should be with caustic."

Caustics are applied to various parts of the body, with a view of exciting a new action and by that means superseding diseased action.

Under this idea, the late Mr. Pott suggested a mode of treating incurvations of the dorsal vertebræ in scrofulous patients, by applying a caustic on each side of the projection, and afterwards establishing a considerable drain, by converting them into large issues, a plan of treatment of which every day's experience proves the propriety. Kali purum is as convenient and useful for this purpose as any caustic that can be applied.

LINIMENTUM ACIDUM.

R Mellis rosæ unc. j Acidi muriatici gutt. xx.

This liniment, the formula of the late Sir William Fordyce, and directed by him in cases of malignant ulceration in the throat, is extremely well calculated for that or any similar purpose. It should be applied with a large camel's hair brush twice or thrice a day; and in cases where its action on the part is likely to be too considerable, the quantity of muriatic acid must be diminished.

LINIMENTUM AMMONIÆ. (L)

R. Aquæ ammoniæ unc. ss Olei olivæ unc. iss misce. This liniment and its uses have been long known. The greatest objection to it is the uncleanliness attending its application.

LINIMENTUM AMMONIÆ CUM CAM-PHORA.

R Camphoræ drach. ij
Olei olivæ unc j
Aquæ ammoniæ puræ unc. iij.

The camphor is to be dissolved in the oil and then added to the water of pure ammonia.

This liniment was employed by the late Mr. Cruikshank, in cases of deep seated inflammation, or to quicken the action of parts that suppurated imperfectly.

LINIMENTUM AMMONIÆ FOR-TIUS. (L)

R Aquæ ammoniæ puræ unc. j
Olei olivæ unc. ij misce.

This differs from the forgoing in no material respect, but in point of strength.

LINIMENTUM AMMONIÆ OPIATUM.

Re Opii purificati unc. iss Spiritus vinosi tenuioris lib. j Aquæ ammoniæ puræ unc. ij. These ingredients are to be digested together in a gentle heat till the opium is dissolved.

This liniment is of service in rigid and painful swellings of the articulations.

LINIMENTUM BITUMINIS AMMONI-ATUM.

Re Petrolei Barbadensis unc. iss Aquæ ammoniæ puræ unc. ss misce.

This remedy was employed by Dr. Kirkland in diseases of the hip and other joints.

He considers the petroleum as "a most powerful dissolver of thickened lymph," and, as a proof of it, remarks its property of curing those accumulations about the joints of horses, called wind-galls.

LINIMENTUM CAMPHORÆÆTHE-REUM.

R Camphoræ drach. j

Ætheris unc. ss.

Olei viperarum drach. ij misce.

The camphor is to be dissolved in the æther, and the oil afterwards incorporated with it.

This formula, communicated by Mr. Ware, is adapted to those obscure affections of the eye in which it is not easy to determine, whether the imperfection of the sight proceed from an

incipient cataract, or a defect of sensibility in the optic nerve. Under these circumstances, this remedy has proved essentially serviceable in many instances.

The mode of applying it is to moisten the point of the finger with it, and to rub it for two or three minutes together, morning and evening, on the outside and edges of the eyelids.

LINIMENTUM CAMPHORÆ AMMÓ-NIATUM.

R Spiritus camphorati unc. ij Aquæ ammoniæ puræ drach. ij misce.

This is calculated to relieve chronic enlargement of the joints, and such other external affections as require the use of topical stimulants.

LINIMENTUM CAMPHORÆ COMPO-SITUM. (L)

Re Camphoræ unc. ij

Aquæ ammoniæ unc. vj

Spiritus lavendulæ simplicis unc. xvj.

The two latter ingredients are to be mixed together in a glass retort, and sixteen ounces drawn off by distillation with a moderate heat. In the distilled liquor the camphor is to be afterwards dissolved.

The design of this liniment would be equally promoted by a simple mixture of the ingredients.

LINIMENTUM CAMPHORÆ CUM SAPONE.

R. Camphoræ drach. ij Unguenti resinæ unc. j Saponis nigri unc. ss misce.

This liniment is adapted to a variety of surgical cases. Dr. Ferriar, of Manchester, strongly recommends it in the lumbago, for which it certainly is an admirable remedy.

LINIMENTUM CERUSSÆ CUM SA-PONE.

R Solutionis saponis unc. ij Aquæ lithargyri acetati drach. j misce.

Though both these appear to be altered in their properties by being mixed together, they form a compound of considerable efficacy.

The oride of lead indeed, is said, by Dr. George Fordyce, to produce more powerful effects when externally applied, than any other chemical preparation of that metal; and the usefulness of this remedy may very possibly depend on that principle. It is a good application for

diseased joints, and for parts bruised, where there is deep seated inflammation.

LINIMENTUM LITHARGYRI COMPO-SITUM.

R. Unguenti lithargyri cum aceto unc. ss Camphoræ gran. viij Cerussæ acetatæ gran. xv Opii pulverisati gran. viij misce.

In psorophthalmy, this liniment proves a very suitable remedy. The inflamed borders of the eyelids are to be lightly smeared with it at bed-time.

LINIMENTUM OLEOSUM.

R Olei seminis lini unc. iss Aquæ calcis unc. iij misce.

This is one of the formulæ of Guy's, and has indeed been used in all the London hospitals, as a remedy for burns and scalds.

It has been usual to prepare this liniment with equal parts of lime-water and olive-oil; but the latter possessing no stimulating qualities, cannot be so proper as the oil here substituted. Both these remedies, however, have been superseded, and justly so, by the linimentum terebinthinæ, recommended by Mr. Kentish.

It is of the last importance in scalds or burns to apply a remedy at the instant of the accident; for by this means, the violent anguish is allayed, and vesication, which, in scalds at least, is usually so considerable as to lay the foundation for a tedious curative process, is in a great degree prevented. Of the remedies most quickly to be found on such occasions, if spirit of turpentine, or spirit of wine and camphor, cannot be had, rum or brandy may be had recourse to. The consequences arising from the application of any thing hotter than boiling water, as steam, melted fat, or lead, though less within the sphere of these hasty remedies, may nevertheless be very powerfully 'counteracted by them, till' others can be procured.

LINIMENTUM OLEOSUM CUM CUPRO.

R Olei olivæ

Aquæ cupri ammoniati sing. unc. ij misce.

This liniment was employed by the late Mr. French, in the case of a gentleman who had a venereal ulcer on the penis, the progress of which was aggravated by a mercurial course. To ulcers of an anomalous description, an applica-

tion of this sort may be tried with some prospect of advantage.

LINIMENTUM OLEOSUM COMPOSITUM.

R Olei olivæ unc. iiss Olei terebinthinæ unc. j Acidi vitriolici gutt. xlv.

The materials which compose this liniment are to be cautiously put together, on account of the heat which is produced by their combination. For this reason, an open vessel must be employed, and the vitriolic acid added gradually.

This liniment, though an inelegant, is commonly an efficacious one in chronic affections of the joints, and in the removal of long existing effects from sprains and bruises. At St. Bartholomew's Hospital, it is frequently ordered, for these purposes, by Mr. Blicke.

LINIMENTUM SAPONIS STIMULANS.

R Linimenti saponis compositi unc. iss Tincturæ cantharidis unc. ss misce.

This is an article in the Formulæ selectæ of Dr. Saunders, and is well calculated to give re-

fief in all cases where it is required to stimulate the skin.

LINIMENTUM SEPIÆ COMPOSITUM.

R Sacchari conditi
Ossis sepiæ sing. drach. ss
Calomelanos scrup. j
Mellis rosæ q. s.

The sugar-candy and cuttle-fish bone are to be finely levigated, and, with the calomel, formed into a liniment with the honey of roses.

This is employed in the same way as the vitrum praparatum, and for the same purposes.

LINIMENTUM SINAPI.

R Seminis sinapi flavi lib. ss Olei terebinthinæ lib. j Camphoræ unc. iv.

The mustard seed is to be well bruised and digested for a week or more in the oil of turpentine. The fluid part is then to be poured off, and what is retained by the mustard seed pressed out; and lastly the camphor is to be added.

This formula, communicated by Dr. Lewin, physician to the dispensary at Liverpool, has been found to resemble very closely Whitehead's

Essence of Mustard, and is thought to have produced equal good effects in cases of local rheumatism.

LINIMENTUM SUCCINI OPIATUM.

R Olei succini rectificati
Tincturæ opii sing. unc. ij
Adipis suillæ præparatæ unc. j. misce.

The tincture of opium and lard being first mixed together in a mortar, the oil of amber is

to be gradually incorporated.

This is a composition of great celebrity in Cheshire as a remedy for the cramp. It is also of considerable use, as an application to parts affected with rheumatism after having been severely sprained.

LINIMENTUM TEREBINTHINÆ.

R Unguenti resinæ flavæ unc. iv Olei terebinthinæ q. s misce.

This is the liniment recommended for burns by Mr. Kentish, of Newcastle. The composition must be so regulated as to admit of its being applied to the part affected upon thin old linen. Previous to this, however, Mr. Kentish gives the following directions.

"Take a tea-cup and put some rectified spirit

of wine, or spirit of wine with camphor, or spirit of turpentine into it, then place it in a bason of hot water, so as to heat it to what you can bear with your finger; then, by means of a rag dipped in this, or a probe armed with a good deal of lint, wash and bathe the whole of the injured surface. When well done two or three times over, apply plasters to the whole, of the foregoing liniment. The wax and oil of the basilicon will fill up the pores of the cloth so as to prevent evaporation, by which means the strong stimulant powers of the turpentine, or alcohol, or camphor, or all together, are so confined upon the surface, as to excite the absorbents to the very increased action we wish; and when this has taken place, the small quantity of oil is sufficient to preserve the cuticle in a pleasant state."

Mr. Kentish advises us only to dress the patient once a day at the first, unless in some instances: if the accident should happen early in the morning, he may be a second time dressed in the evening, but it will be better even to allow him to remain for the first twenty-four hours without being disturbed; for if the plasters are spread tolerably thick with the liniment, there will be no need of using any further means until the next dressing.

66 On the following day (says Mr. Kentish),

when you are going to dress the patient, the first thing to be done is to have fresh plasters spread before you begin to take off the others; (they are to be spread with the digestive liniment, the same as at the first dressing), and then not to take off more than one at once, as the less time the parts are exposed to the action of the external air the better. It will seldom be necessary to have recourse a second time to the application either of the pure heated alcohol, or camphor. ated alcohol, or spirit of turpentine, as the redness or apparant inflammation will appear much less vivid; it will be necessary therefore to diminish your exciting means as the action diminishes; some proof spirit, or some laudanum with the coldness taken off, will be sufficient for this dressing, and the plasters immediately applied: they ought to have been so near a fire as to make them near the temperature of the patient's body, to avoid any chilliness succeeding their application; this being done, your patient is to remain quiet for twenty-four hours longer, at which time you will generally find that the appearance of inflammation has disappeared, and where there had been any small vesications in the first instance, there will be seen such a secretion of pus as may be noticed the second day after the application of a blister; the stimulants will now have performed their office, and if

persevered in, they will produce unpleasant effects themselves, somewhat resembling the complaint they were meant to cure, although on a different part of the system; as by these means the external absorbent vessels would be the most excited, whereas the original accident appears to have excited the exhalant vessels more; for which reason, as the equilibrium of action will appear nearly to be restored, it will now be necessary to apply less irritating substances."

Instead of the liniment with spirit of turpentine, Mr. Kentish advises that the basilicon be reduced to a proper consistence with camphorated oil; and if, with this, any irritation take place, the use of ceratum lapidis calaminaris, or Goulard's cerate.

To repress the growth of fungus, and to absorb the redundant secretion, we are advised to apply powdered *chalk* as recommended by Mr. Cleghorn.

"As soon as secretion takes place (says Mr. Kentish), I begin the use of powdered chalk, heated to the temperature of the body; which is plentifully applied to the whole secreting surface, and afterwards covered with a plaster spread with cerate. In case of eschars coming away, or while they are detaching themselves, I fill up the hollow made by their loss when se-

parated, and fill up the furrow at their edges when loosening, with powdered chalk, covered with the plaster; and if the process be tedious, a poultice of bread and milk is applied over the plaster. In very severe and extensive accidents of this kind, I have used this method throughout the whole cure after the formation of pus, and have in general found it prevent the necessity of either astringent or caustic applications: nor on the other hand have I found it retard the cure, by repressing the necessary secretion."

The principle on which these local applications are recommended, as well as the corresponding internal treatment by the free use of stimulants and opium, which Mr. Kentish recommends, will be best understood from the following recapitulation of his own arguments.

"Thus we see the whole of the former treatment inverted; the most gentle soothing means were used both externally and internally, when an accident of this terrible nature happened; these were continued until suppuration took place, and then the system was excited under an idea of supporting it, which not unfrequently so fatigued the system, as induced a fever of the hectic form. The present mode is the reverse of this; when a part of the frame has been much excited, this part is not allowed to cease to act

for want of stimulus, but is kept in action by an adequate stimulus, gradually diminishing it until it returns to its ordinary action. With the same view the internal means are highly stimulant to the whole system, which must be supposed to be in a natural state at the time of the accident. Thus increasing the action of the whole generally, by strong stimuli, and decreasing the action of the part by lessening the stimuli, the desired end will be more readily obtained, that is, the equilibrium of the action will be restored. Should the injury have gone the length of destroying any part of the body, I have observed that this cannot take place without some other parts of the system only having their action increased. The restoration of those yet living parts must be first attended to; and this very mode will facilitate the process of throwing off the dead parts, which, when done, and a suppuration having taken place, the exciting of the system by any thing stimulant, either by food or medicine, should be cautiously avoided. Should the secretion of pus continue too great, gentle laxatives, and a spare diet, are indicated. If any part, as the eyes for instance, keep weak, with a tendency to inflammation, topical bleedings, or small quantities of blood taken from the arm, are useful. To defend the new skin, camphorated oil, or camphorated oil and lime-water,

equal parts, are very good topical applications. Wounds of this kind heal very fast when the diminution of pus is prevented, by attention to the diet. If it is necessary to keep up the patient's strength, small doses of bark, taken two or three times a day in some milk, will answer that purpose, and will not excite a quickened circulation, as wine, ale, or spirit, is apt to do.

"By attention to these general principles, I can truly assert, that I have cured very many extensive and dangerous burns and scalds, in one, two, three, and four weeks, that by the former method would have taken as many months; and some which I believe to have been incurable by the former method."

the former methods

LINIMENTUM TEREBINTHINÆ COM-POSITUM.

R Olei terebinthinæ unc. iij Camphoræ drach. ij Unguenti cantharidis unc. j.

The ointment of cantharides being melted in a water bath, the camphor must next be added in a powdered state, and lastly the oil of turpentine.

As an active stimulant this liniment may be applied to many useful purposes in surgery.

LINIMENTUM TUTIÆ.

R Tutiæ præparatæ drach. j Mellis rosæ q. s. misce.

This liniment should be made of the consistence of treacle, and in that state, may be considered as a good substitute for the more operose formula of Sir Hans Sloan.

LINIMENTUM ZINCI VITRIOLATI.

R Zinci vitriolati scrup. j Adipis suillæ præparatæ unc. ss.

The vitriolated zinc being very finely powdered, is afterwards to be well incorporated with the lard.

This liniment is exceedingly useful in the cure of that chronic inflammation of the eyelids, to which old people are particularly obnoxious.

LIQUOR CUPRI AMMONIATI.

Re Calcis cupri drach. j Aquæ ammoniæ unc. ij.

These are to be digested together, without heat, till the copper is dissolved.

The calx may be made, by dissolving a quantity of cuprum vitriolatum in water, and adding

to it as much of a solution of kali præparatum as will throw down the copper, which is afterwards to be well washed and dried.

The principal use of this, is for the composition of the injectio cupri ammoniati.

LIQUOR HYDRARGYRI MURIATI.

R Hydrargyri muriati drach. j Acidi muriatici q. s.

The acid is to be gradually added to the muriated quicksilver, and rubbed in a glass mortar, till the solution is complete.

Two drops of this liquor is nearly equivalent to one grain of the muriated quicksilver.

LIXIVIUM MARTIS.

The matter which remains after subliming the ferrum ammoniacale, being set in a moist place, deliquesces, and forms this remedy, which is used in surgery only as a styptic. It is applied to the bleeding vessel upon lint.

The celebrated powder of Faynard for stopping hemorrhages, is said, by Dr. Odier, to be nothing more than the charcoal of beech-wood finely powdered. This is also said to be very effectual in internal bleedings, if given in the dose of a teaspoonful three or four times a day.*

^{*} See Duncan's Medical Commentaries for 1793.

A styptic capable of stopping the effusion of blood from a large artery, would be a valuable discovery; and many remedies said to possess this power have been successively introduced to public notice; but their reputation has not been lasting. The trials made have commonly been on the principal arteries in the extremities of quadrupeds, as the horse, ass, &c. but it is well known, that the blood-vessels in these possess a property of contraction, which does not exist in more perfect animals.

LOTIO ALUMINIS.

R Aluminis unc. ss Aquæ distillatæ lib. j.

This is the alum lotion of St. Bartholomew's Hospital. It is employed sometimes as a discutient and likewise with a view of checking the progress of external inflammation.

LOTIO AMMONIÆ ACETATÆ.

R Aquæ ammoniæ acetatæ
Spiritus vinosi rectificati
Aquæ distillatæ sing. unc. iv. misce.

This lotion is of great use in external inflammation, but more particularly serviceable in the early stage of the milk breast. In these cases, however, many surgeons prefer the aqua ammoniæ acetatæ alone.

Linen rags should be dipped into it, as in other instances, and kept continually on the part affected.

LOTIO AMMONIÆ MURIATÆ.

R Ammoniæ muriatæ unc. j Spiritus rosismarini lib. j.

The muriated ammonia being powdered and dissolved in the spirit, forms the lotion so strongly recommended by the late Mr. Justamond in his treatise on the cure of the milk breast.

Its properties resemble those of the lotion of acetated ammonia, and it is to be applied to the breast precisely in the same manner.

LOTIO AMMONIÆ MURIATÆ CUM ACETO.

R Ammoniæ muriatæ unc. ss Aceti Spiritus vinosi rectificati sing. lib. j misce.

This lotion is employed at St. Bartholomew's Hospital as a discutient.

LOTIO AMMONIÆ OPIATUM.

R Spiritus ammoniæ compositi unc. iiiss Aquæ distillatæ unc. iv Tincturæ opii unc. ss misce.

This lotion is applied by Dr. Kirkland, to tumours of a suspicious nature, in the breasts of women. Prepared natron and bark, are administered internally at the same time.

LOTIO HYDRARGYRI MURIATI.

R Aquæ rosæ lib. j
Liquoris hydrargyri muriati gutt. xl
misce.

This lotion is a very suitable remedy in cutaneous diseases, and for the itch. In a more diluted state, it may also be applied to foul ulcers with advantage.

LOTIO HYDRARGYRI MURIATI COMPOSITA.

R. Hydrargyri muriati gran. x Aquæ distillatæ bullientis unc. iss Tincturæ cantharidis unc. ss. misce.

The late Dr. Hugh Smith directed this lotion to be applied, every night, to scrofulous swellings.

LOTIO KALI SULPHURATI.

R Kali sulphurati unc. ss Aquæ calcis lib. j.

The sulphurated kali is to be powdered and joined, by triture, with the lime water.

At St. Bartholomew's Hospital they employ two drams of the former to a pint of distilled water. Either of these may be considered as a neat and useful application in the tinea capitis.

LOTIO LITHARGYRI ACETATI. No. I.

R. Aquæ lithargyri acetati drach. ij Aquæ distillatæ lib. ij Spiritus vinosi rectificati unc. j misce.

This differs from the aqua lithargyri composita of the College, only in the proportion of the spirit of wine, which is here considerably augmented.

The extensive utility of this composition is very generally known. It may be remarked, however, that the copious and persevering way in which lead water has heretofore been applied to the skin, produced deleterious effects in many instances. To meet this objection, solutions of vitriolated zinc have been substituted, very pro-

perly, by most practitioners; but there is reason to apprehend, from the experience of Mr. Baynton in his treatment of ulcers,* that cold water alone will effect every thing we have been accustomed to expect from metallic or astringent solutions.

No. II.

R Cerussæ acetatæ unc. ss Aceti unc. iv Aquæ distillatæ lib. ij misce.

Mr. Bell recommends the foregoing lotion as a substitute; the vinegar contained in it keeping the lead more completely in solution.

LOTIO LITHARGYRI ACETATI CAM-PHORATA.

R Spiritus camphorati drach, ij Aquæ lithargyri acetati drach, j Aquæ distillatæ lib. j.

The mixture of these is to take place in the order they are set down, otherwise the camphor will be separated.

This lotion is of considerable use in topical inflammations, those especially which are suspected to have a tendency to erysipelas.

^{*} See the article Emplastrum lithargyri cum resina.

LOTIO MYRRHÆ.

R Tincturæ myrrhæ Aquæ calcis sing. unc. ij misce.

Pledgits dipped in this lotion, were applied successfully by Dr. Kirkland, in a case of fungus of the brain.

LOTIO PICIS LIQUIDÆ.

R Picis liquidæ unc. iv Calcis unc. vj Aquæ ferventis lib. iij.

These are to be boiled together till half is evaporated, and the clear liquor afterwards poured off.

This, which appears to be well calculated as a remedy for tineu capitis, is an article included in the Formulæ selectæ of Dr. Saunders.

LOTIO SPIRITUOSA.

R Spiritus vinosi rectificati unc. iv Aquæ calcis lib. ss misce.

This is an elegant and soothing application to inflamed parts.

LOTIO SPIRITUOSA CAMPHORATA.

R Florum sambuci unc. ss Camphoræ drach. ss Spiritus vini rectificati unc. iv.

The elder flowers and camphor are to be infused together in the spirit of wine for twenty-four hours, and the clear liquor afterwards poured off.

In a weak state of the eye, where a want of power in the optic nerve is suspected, Mr. Ware directs this to be occasionally applied with the finger to the outside and edges of the eyelids, and also every night and morning, by means of a bit of linen rag, wetted, and left for a minute or two over the eyelids; wiping them dry afterwards, and observing to use a fresh bit of rag on every fresh application of the liquid.

LOTIO ZINCI VITRIOLATI.

R Zinci vitriolati drach. ss Aquæ distillatæ lib. ss misce.

This solution has the common properties of astringent lotions in general, and is also, when farther diluted, a beneficial application to promote the cicatrization of ulcers. At Guy's Hospital, it is used in the proportion of ten grains to half a pint.

The known ill effects, consequent on the application of preparations of lead to the skin, have, in a great measure, determined practitioners to substitute in their place, solutions of vitriolated zinc, which are found to answer the purpose of counteracting external inflammation equally well.

MEL BORACIS.

R Boracis drach. j

Mellis despumati unc. j misce.

This is usual at Guy's Hospital, as an application to the mouth, in aphthæ.

MEL HYDRARGYRI.

R Hydrargyri purificati

Mellis despumati sing. unc. j.

These are to be rubbed together till the globules of quicksilver disappear. The dose is from five to ten grains night and morning.

There is no reason why this formula, which is given us by Mr. Bell of Edinburgh, should be preferred to any other, in which the quicksilver is merely divided by triture.

MEL HYDRARGYRI COMPOSITUM.

R Mellis hydrargyri drach. ij Mellis despumati unc. ij Olei caryophylli essentialis drach. ij misce.

This is recommended by Mr. Nayler, of Glocester, as an application to venereal or anomalous ulcers in the mouth and throat. It is applied to them several times in the day, by means of a feather or camel's hair pencil.

As this remedy is rendered very stimulating by so considerable a proportion of oil of cloves, its good effects probably result from its power of exciting a new action in the diseased parts.

MEZEREUM ACETATUM.

Very thin slices of the bark of the fresh root of mezereon, are to be steeped for twenty-four hours in common vinegar.

The late Dr. Morris usually directed the application of this remedy to issues, when a discharge from them could not be encouraged by the common means. It generally answers this purpose very effectually in the course of one night, the pea being removed, and a small portion of the bark applied over the opening.

MISTURA COPAIBÆ CUM OLIBANO.

R. Balsami copaibæ unc. ss Olibani drach. ij Mucilaginis arabici gummi unc. iss Mellis despumati unc. j Aquæ cinnamomi unc. v.

The olibanum, powdered and mixed with the copaiba, is to be incorporated with the honey and mucilage, and the cinnamon water afterwards added. In the dose of two or three tablespoonfuls twice or thrice a day, this will be found of considerable service in gleets, and in the latter stage of gonorrhæa. In like manner the canada balsam, balsam of tolu, and other similar remedies, may be advantageously compounded.

MISTURA MYRRHÆ COMPOSITA.

R Mellis rosæ

Tincturæ myrrhæ sing. drach. ij Aquæ calcis unc. iss misce.

This mixture is chiefly calculated for an application to ulcers within the mouth, in which case, it is to be applied upon lint. It is however equally proper for scrofulous and other sores, where greasy applications are inadmissible.

MOXA.

This is the mugwort of China, a soft lanuginous substance prepared in Japan from a species of artemisia (little differing from our common mugwort), by beating the dried leaves and rubbing them betwixt the hands till the downy part can be separated.

It is famous in the East for curing the gout, and as a species of actual cautery in other cases, and is used in the following manner. "A little cone of the moxa is laid upon the part, previously moistened, and set on fire at the top. It burns down with a temperate glowing heat, and produces a dark-coloured spot, the exulceration of which is promoted by applying a little garlic. The ulcer is left to discharge, or is soon healed, according to the intention in using the moxa."

The ancients were much in the practice of using the actual cautery; often with extraordinary benefit, and with little pain to the patient. Should it be required in any particular instance, the dread of the operation would be much lessened by having recourse to the simple process here described.

MUCILAGO ARABICI GUMMI. (L)

R Arabici gummi unc. iv Aquæ ferventis unc. viij. These are to be occasionally stirred till the solution of the gum is effected.

MUCILAGO SEMINIS CYDONII MALI. (L)

R Seminum cydonii mali drach. j Aquæ distillatæ lib. ss.

These are to be slowly boiled over the fire till the liquor thickens, after which it is to be strained through a cloth.

We form, by this means, a delicate mucilage, which possesses properties somewhat different from that of gum arabic, particularly in not being so easily washed away from the part to which it is applied. Hence it is to be preferred as an ingredient in injections, and as a means of palliating the irritation of ulcers in the throat.

NATRON PRÆPARATUM. (L)

This is employed, in scrofulous affections, in lieu of burnt sponge, of which, indeed, it is the basis.

The dose, in these cases, is from ten or twenty grains to two drams. It has been recommended, in very strong terms, in calculus and in nephritic diseases, by Dr. Beddoes.

OLEUM PALMÆ CAMPHORATUM.

R Camphoræ unc. ij Olei palmæ lib. j.

The camphor is to be reduced to powder, and the palm oil, melted and suffered to become nearly cold, is to be mixed with it in a mortar.

On account of its great diffusibility, the oil here directed will be found a better vehicle for the camphor than olive oil, or any other unctuous substance.

This is an exceedingly useful application to promote the suppuration of abscesses; and with that view, when poultices are used, it may be previously rubbed on the suppurating part.

This and several valuable formulæ in the course of this work, were in use at the Glocester Infirmary, and introduced there by Dr. Cheston, during his practice as a surgeon.

OLEUM E SEMINIBUS LINI. (L)

The medicinal uses of linseed oil are confined to two, that of an ingredient in the linimentum oleosum, and that of an application to cancerous sores. In the latter, much has been asserted of its properties, and cases have been said to terminate successfully by its use. In the noli me tangere at least, it certainly has proved of considerable service.

OLEUM E SEMINIBUS RICINI. (L)

The use of this, as a mild yet efficacious purgative, is well known.

In surgical cases, where purging with the least possible degree of irritation is required, this remedy is, of all others, to be recommended.

OLEUM TEREBINTHINÆ. (L)

This is a well-known medicine. It is used internally in gleets and nephritic complaints, and externally as a stimulating liniment and a styptic, in which latter characters it proves no inadequate remedy, although surgeons seldom have recourse to it.

A solution of mastich in oil of turpentine forms an advertised remedy for the tooth-ach.

OLEUM TEREBINTHINATUM.

R Olei amygdalæ unc. ss Olei terebinthinæ gutt. xl. misce.

In deafness occasioned by defective or diseased actions of the glandulæ cerumeneæ, Mr. Maule directs a little of this oil to be dropped into the patient's ear, or applied at the end of a small dossil of cotton.

When a thin secretion takes place, the cure is also promoted, by a small blister, which he

orders to be placed as near to the ear as convenient, and kept open by the common means.

Added to this, it is exceedingly material, to keep the cavity clean by daily wiping with a lengthened bit of soft cotton, affixed to a probe and passed to the bottom of the ear. This, being twirled gently round, will absorb that moist and offensive discharge, which, if suffered to remain, might be capable of aggravating the symptoms, or at least retarding the cure. Many people employ for this purpose, a large camel's hair pencil, which is to the full as convenient.

OPIUM PURIFICATUM. (L)

The knowledge of this remedy is almost as extensive as its usefulness in medicine and surgery. Its properties are so generally understood, that no particular remarks on them can be thought necessary in this place.

OXYMEL ÆRUGINIS. (L)

R Æruginis præparatæ unc. j Aceti unc. vij Mellis despumati unc xiv.

The verdigris is to be dissolved in the vinegar, which is afterwards to be joined with the honey, and the whole boiled to a proper consistence. The valuable qualities of this remedy have never been properly appreciated. When sufficiently diluted, either with water or by mixture with digestive ointments, it proves very effectual in the treatment of scrofulous or unhealthy ulcers. Formed into a gargle, it is often of service to small ulcers in the mouth, and to the gums when in a spongy state.

PASTA PIPERIS COMPOSITA.

Radicis enulæ campanæ sing. lib. j Seminum foeniculi dulcis lib. iij Mellis despumati Sacchari purificati sing. lib. ij.

The three first ingredients are to be finely powdered and well mixed, after which, the honey and sugar, melted together over the fire and formed into a clear syrup, are to be added, and the whole beaten together into a mass.

The bulk of a nutmeg of this is ordered to be taken morning, noon, and night, drinking a glass of water or white wine after it.

This is the celebrated paste of Dr. Ward, which, though a singular kind of composition, has so long stood the test of experience, as certainly to deserve a place amongst our chirurgical formulæ.

There can be no doubt of its usefulness in some diseases of the rectum, those especially which happen in debilitated habits, and which have been of long duration. In the piles and in some cases of fistula, there are numerous proofs of its efficacy.

PILULÆ ARGENTI NITRATI.

R Argenti nitrati gran. iij
Aquæ distillatæ gutt. aliquot
Micæ panis q. s. ut ft. pil. xx.

Two or three of these pills, twice a day, are recommended in the *Formulæ selectæ* of Dr. Saunders to counteract morbid debility in epileptic cases; but this remedy is no less worthy of a trial in obstinate leprous and other cutaneous affections, phagedænic ulcerations, and ulcers of an anomalous character, where the constitution is principally concerned.

PILULÆ CALOMELANOS.

R. Calomelanos drach. j
Pulveris opiati drach. iij
Syrupi simplicis q. s. Fiant pilulæ lx.

These are the calomel pills of Guy's Hospital. The proportion of opium in the pulvis opiatus is about seven grains to a dram.

PILULÆ CALOMELANOS COMPO-SITÆ.

R Calomelanos drach. j Antimonii tartarisati gran. xv Opii purificati drach. ss Syrupi simplicis q. s. Fiant pilulæ lx.

These are employed in St. Thomas's Hospital, in the dose of one twice a day, in diseases of the joints. They also prove of service in cutaneous and herpetic affections, and assist greatly in the cure of obstinate ulcers, where the constitution appears to be materially concerned.

It may be proper here to observe, that the junction of antimony with preparations of quick-silver, disposes the latter very much to affect the mouth. For this reason, in obstinate venereal cases, where the specific effect of quicksilver cannot be excited by the common means, the exhibition of it agreeably to the foregoing formula, is recommended by Dr. George Fordyce.

PILULÆ CALOMELANOS CUM ANTI-MONIO.

R Calomelanos
Sulphuris antimonii præcipitati sing.
drach. j

Guaiaci gummi-resinæ drach. ij Balsami copaibæ q. s. Fiant pilulæ lx. Plummer's pill was the name formerly given to this composition. Its use in cutaneous affections is pretty generally acknowledged. From one to four of these pills may be given every night.

PILULÆ CANTHARIDIS.

R. Cantharidum gran. xviij
Opii
Camphoræ sing. gran. xxxvj
Conservæ cynosbati q. s. Fiant pilulæ
xxxvj.

One of these, taken every night and morning, increasing the dose very cautiously, is of service in certain cases of impotence. In such however, it is of importance to examine, whether the *mind* or the organs of generation are in fault. In the latter, a discreet use of the pills may prove highly beneficial. Mr. Hunter's account of these cases is well worthy of being consulted.

PILULÆ CICUTÆ.

R Succi cicutæ unc. ss

Pulveris herbæ cicutæ q. s. Fiant pilulæ lx.

Hemlock is well known as a remedy in cancer, scrofula, and syphilis. The formula here given is from Guy's Hospital, and similar indeed to the mode of preparing the extract sold in the

shops.

On the medical properties of hemlock, a great diversity of opinions have been maintained, and for this there is a mode of accounting, of which few perhaps are aware.

According to some writers, but more particularly Dr. Withering, there are several ways in which the views of a medical practitioner, in prescribing this remedy, may be frustrated. The plant chosen for preparing the extract, may not be the true conium maculatum, which is distinguished by red spots along the stalk. may not be gathered when in perfection, namely, when beginning to flower. The inspissation of the juice may not have been performed in a water-bath, but, for the sake of dispatch, over a common fire. The leaves, of which the powder is made, may not have been cautiously dried and preserved in a well stopped bottle; or if so, may still not have been grarded from the ill effects. of exposure to the light. Or lastly, the whole medicine may have suffered from the mere effects of long keeping. From any of these causes, it is evident, the powers of cicuta may have suffered; and it happens, no doubt, very frequently, that the failure of it ought, in fact, to be attributed to one or other of them.

The mode of administering hemlock, is by beginning with a very small dose, and augmenting it gradually, till the patient begins to experience some inconvenient effects in the head and stomach; at which period it is, that the good effects, if any can be produced, will be manifest. From one pill to twenty, may therefore be taken in twenty-four hours.

PILULÆ CUPRI VITRIOLATI.

R Cupri vitriolati gran. xv

Extracti cinchonæ sing. drach. ij Syrupi simplicis q.s. Fiant pilulæ lx.

These, in the dose of from one to four in a day, are calculated to remove gleets, and are sometimes useful in the latter stage of gonorrhæa.

PILULÆ FERRI AMMONIACALIS.

R Ferri ammoniacalis drach. iij Mucilaginis arabici gummi q. s. Fiant pilulæ lx.

The late Mr. Justamond, and Dr. Cheston, employed these pills to a great extent, and with decided advantage, in cancerous affections of the uterus; the hemlock bath being employed at the same time. Joined with the extract of hemlock, it also forms a useful medicine.

In the preparation, it will be necessary to beat the ingredients well in a mortar, in order that the mass may become sufficiently tenacious to form into pills; and when made, they should be dried before the fire, and kept in a close vessel to prevent the moisture which they will otherwise attract from the atmosphere.

PILULÆ HYDRARGYRI.

In employing quicksilver in venereal cases, there is reason to believe, that a preference is due to it in its most simple state. In this way, its particles are minutely divided, and not being combined with any acid, as in the case of the more elaborate preparations, its use, in diseases, is unattended with those inconveniencies, for which the latter have been very justly complained of.

No. I.

R Hydrargyri purificati
Extracti glycyrrhizæ, mellis crassitudinem habentis, sing. drach. ij
Glycyrrhizæ in tenuem pulverem triti
drach. j.

The quicksilver being divided by triture with the extract, the powdered liquorice is to be added. This is the *quicksilver pill* of the London College.

No. II.

R Hydrargyri purificati drach, ij Theriacæ vulgaris scrup, ij Amyli in pulverem triti q. s.

The quicksilver is to be rubbed with the treacle, till the globules entirely disappear, and the starch is then to be gradually added.

As the mixture is apt to grow too thick during the triture, it is necessary to add a drop or two of water occasionally, and particularly at the moment of adding the starch, which should be performed carefully, otherwise the quicksilver will run into globules.

When the mass is of a proper consistence, it is to be divided into twenty-four pills, of which one or two may be given night and morning. In this way, quicksilver may be administered in a larger proportion in each pill, than if prepared, as directed by the College, with extract of liquorice.

No. III.

R Hydrargyri purificati unc. j Mucilaginis arabici gummi drach. iij Amyli in pulverem triti q. s. Fiant pilulæ cxx.

This is the quicksilver pill of Dr. Kirkland. The quicksilver and mucilage are to be rubbed

together, and the starch added by little and little, till the globules are extinguished, and the whole forms one uniform mass.

The process, conducted in this way, is much more expeditious than the foregoing, and there is less chance of revivification of the quicksilver. Four grains are contained in each pill.

PILULÆ HYDRARGYRI ACETATI.

R Hydrargyri acetati drach. j Medullæ panis dra. ij. Fiant pilulæ lx.

These are reckoned similar to that once celebrated remedy, Keyser's dragées. The dose is from one to five every night.

PILULÆ HYDRARGYRI CALCINATI.

R Hydrargyri calcinati
Opii
Camphoræ sing. drach. j
Syrupi simplicis q.s. Fiant pilulæ lx.

In cases which require the specific action of quicksilver, one or two of these may be given

every night.

In the pilulæ hydrargyri calcinati of Guy's Hospital, camphor is not included; but its cooperation with the opium in checking their disposition to purge, is by no means inconsiderable.

PILULÆ HYDRARGYRI CUM CICUTA.

R Hydrargyri purificati drach. j Arabici gummi pulverisati drach. ij Succi cicutæ spissati drach. j Herbæ cicutæ foliorum, in pulverem tritorum, q. s.

The quicksilver is first to be reduced by triture with the gum arabic, moistened with a little rain water. The inspissated juice of hemlock is afterwards to be added, and lastly the powdered leaves in sufficient quantity to make a suitable mass for pills.

These, with a slight variation in the proportion of the hemlock, are the *pilulæ mercuriales* of Plenck, who directs three or four pills, each of three grains, to be given every night and morning.

There are, no doubt, many cases to which this formula must be very suitable; such, for instance, as the enlarged prostate gland, &c.

Dr. Saunders in his Formulæ Selectæ directs equal parts of pil. hydrarg. and succ. cicut. spissat. for these, or such like, purposes.

PILULÆ HYDRARGYRI PRÆCIPITATI CINEREI.

R Hydrargyri præcipitati cinerei drach. j Conservi cynosbati q.s. Fiant pilulæ lx.

One or two of these may be given every night and morning.

PILULÆ HYDRARGYRI VITRIOLATI.

R. Hydrargyri vitriolati
Opii sing. drach. j
Syrupi simplicis q. s. Fiant pilulæ lx.

The dose of these, is one or two every night.

PILULÆ OPII CAMPHORATÆ.

R Opii purificati drach. j Camphoræ drach. ij Syrupi simplicis q.s. Fiant pilulæ lx.

These are of considerable service, in the dose of one or two every night, in counteracting the chordee and painful erections, that frequently accompany a gonorrhea.

The unquentum hydrargyri camphoratum rubbed along the course of the urethra at the same time, will be found of service.

PILULÆ OPII COMPOSITÆ.

R Opii purificati
Camphoræ sing. drach. j
Antimonii tartarisati gran. xv.
Syrupi simplicis q.s. Fiant pilulæ lx.

These pills are of use, in any case where pain is to be alleviated, and a gentle diaphoresis produced. But they are more immediately calculated to prevent the night symptoms in a gonorrhoea, in which case, they are, in general, more to be depended on than the foregoing; but their sudorific qualities may possibly, in some cases, prove an objection to their being taken every night.

PILULÆ TEREBINTHINÆ CUM RHABARBARO.

R Terebinthinæ coctæ drach. ij Pulveris radicis rhabarbari drach. j misce.

These are to be formed into thirty-six pills. Three, twice a day, are prescribed by Mr. Cline in gonorrhœas, gleets, or such discharges as seem to proceed from an affection of the prostate gland. Both the ingredients which compose these pills, have the property of passing very readily into the urine, and thus a local effect is produced.

A greater flow of urine is also occasioned by the stimulating action of the turpentine on the kidneys; and in this way, the irritating qualities of the urine become less, in proportion to its quantity.

PILULÆ ZINCI VITRIOLATI.

Re Zinci vitriolati drach. ij

Terebinthinæ vulgaris q. s. Fiant pilulæ lx.

These also are applicable to the cases last mentioned, and may be taken in the dose of one or two night and morning.

PULVIS ALUMINIS COMPOSITUS.

R Aluminis usti Hydrargyri nitrati rubri sing. drach. j

These, well rubbed together, form the pulvis angelicus of the late Mr. Samuel Sharp, who employed it as an escharotic, and who attributed to these remedies, when joined, virtues which could not be attributed to either of them singly.

PULVIS ANTIMONIALIS.

R Calcis antimonii Calcis phosphoratæ sing. unc. j Acidi muriatici q.s. These are the ingredients proposed by Mr. Chenevix, for the composition (in the humid way) of James's Powder, a remedy admitting of such a variety of uses both in medicine and surgery.

That ingenious chymist describes the first by the general term "white oxide of antimony" (algaroth powder); which, he says, may be dissolved either singly, or in conjunction with the phosphate of lime, by the least possible quantity of the acid.

These solutions, united, are to be gradually poured into a quantity of distilled water, previously alkalizated by a sufficient quantity of ammonia. The precipitate being afterwards collected, washed, and dried, forms the antimonial powder in question, which, according to the testimony of several medical gentlemen, agrees perfectly in its general effects with James's powder, except in being so far milder as seldom to occasion nausea or vomiting.

In cases where a stronger preparation is required, Mr. Chenevix directs two parts of the oxide of antimony to one of the phosphate of lime; conducting the rest of the process in a similar manner.

PULVIS CINCHONÆ CUM MYRRHA.

R Cinchonæ in pulverem triti

Myrrhæ in pulverem triti sing. unc. ss
misce.

This powder was applied, by Dr. Kirkland, in that species of sphacelus, which is not attended with any considerable degree of inflammation, and where hot fomentations and poultices do harm.

PULVIS COLOMBÆ.

This, next to *rhubarb*, is considered by Mr. Home, as the best application to ulcers which cannot be brought into a healing state by the common remedies. When the rhubarb begins to lose its effect, this powder will frequently occasion the healing process to go on again, and finally to effect a cure. See Pulvis Rhabar-Bari.

When the powder of columba is used, the fleshy granulations manifest a disposition to rise above the surface; a circumstance which does not occur under the use of rhubarb.

PULVIS HYDRARGYRI VITRIOLATI COMPOSITUS.

R Hydrargyri vitriolati gran. j Pulveris glycyrrhizæ gran. viij misce. This is the snuff recommended by Mr. Ware, as a remedy in gutta serena. He directs one-fourth of this quantity, to be snuffed up the nostrils, once or twice a day.

PULVIS IPECACUANHÆ COMPO-SITUS. (L)

R Ipecacuanhæ

Opii purificati duri sing. in pulverem tritorum drach. j.

Kali vitriolati in pulverem triti unc. j

Many surgeons are disposed to prefer this remedy to the vinum antimonii opiatum, in concussions of the brain; but, upon what ground of superiority, is not very evident.

PULVIS LAPIDIS CALAMINARIS CUM MYRRHA.

R. Lapidis calaminaris præparati
Myrrhæ pulverisatæ sing. unc. ss misce.

This is in general use at St. Bartholomew's Hospital, as a means of promoting the cicatrization of ulcers. It is merely sprinkled, with a piece of cotton, on the ulcer, which is afterwards dressed superficially.

How far the former ingredient is of importance in this composition, the reader may judge from what is said under CERATUM LAPIDIS CALAMINARIS.

PULVIS NITRI COMPOSITUS.

R Nitri unc. ij Hydrargyri sulphurati rubri drach. ij Calomelanos scrup. j misce.

This, though a composition somewhat heterogeneous, is nevertheless a powerful remedy in counteracting the inflammation in a gonorrhea.

It is the *pulvis refrigerans* of Falck, who directs it to be taken, in the dose of half a dram or two scruples, night and morning.

PULVIS RHABARBARI.

The powder of rhubarb as an application to ulcers, was introduced into practice by Mr. Home, who tried it very extensively, and with much success, in St. George's Hospital. It has not however been explained, in what particular species of ulcer it is most serviceable; nor on what principle it acts.

Mr. Home gives the following account of

this remedy:

"As rhubarb "says he" has considerable powers in stimulating the villous internal surface of the stomach and intestines, which in appearance is not very dissimilar to that of a granu-

lating sore, I made choice of this powder as an external application.

"I began my experiments by covering the surfaces of several ulcers with the powder of rhubarb, very thinly spread over them, and afterwards dressing them with a pledget of common bintment. These applications were renewed once in twenty-four hours. Under this treatment the sores mended for several days, and then seemed to be at a stand, although they retained a healing appearance. This circumstance was not readily accounted for, but as the pledget was exceedingly greasy, and came in contact with the edges, and many other parts of the sore, it was attributed to that cause, and a piece of lint was therefore interposed between the powder and the unctuous covering, after which the granulations became disposed to form skin, and the sores were gradually healed.

"Encouraged by these trials, I made use of this powder under a variety of circumstances, with a similar result. In some cases it appeared, after being continued some time, to lose its effect upon the ulcer. But even in these instances, the applying it twice in the same day was sufficient to restore the first effect. In other cases the rhubarb seemed to be too violent an application, in some degree disposing the granulations to ulcerate; this effect was however prevented, by adding to it the powder of opium, in the proportion of a drachm to an ounce. By these means the application of this medicine may be adapted to the degree of indolence or irritability in the sore to which it is applied.

"When the rhubarb is first applied, the sore is commonly more painful than it was before, and the whole surface becomes of an uniform red colour. In foul ulcers, where the matter is principally composed of coagulable lymph, adhering to the surface, a change is produced in the discharge; it becomes more like true pus, which separates from the surface, and exposes the granulations to our view.

"In sores where the granulations are large, spongy, and semitransparent, under this treatment they become small, firm, very pointed at the surface, and of a florid colour; they are also sensible to the touch, making the sore extremely tender.

"The granulations, as soon as they have risen to the level of the skin, seem to have a stop put to their growth; and those that are next to the surrounding cutis lose their irregular pointed appearance, become smooth, shining, and of a more florid colour than the rest of the sore. In this way a margin is formed, about one eighth of an inch broad, which is afterwards covered by a cuticle, contracting the

size of the sore; and this process goes on till the whole is skinned over.

"This circumstance of the granulations becoming stationary when arrived at the level of the skin, is so general an effect, that in an hundred cases, many of these sores nearly equal to six inches square, no one instance to the contrary has occurred.

"When the sore is beginning to heal, or has in part skinned over, the powder adheres firmly to the edges, and sometimes to the surface of the granulations, forming a crust over these parts. This should be carefully removed at each dressing, as it confines the matter, which is often productive of mischief and always retards the progress of the cure."

PULVIS RHABARBARI COMPOSITUS.

R Pulveris radicis rhabarbari Pulveris radicis ipecacuanhæsing. drach. ij misce.

This powder has been employed at St. George's Hospital, by Mr. Home, for the removal of warts.

PULVIS SABINÆ COMPOSITUS.

R Pulveris foliorum sabinæ

Æruginis præparatæ sing. drach. ij misce.

This powder is recommended by Mr. Hunter, and likewise employed in all the Hospitals, for the cure of warts and excrescences. They are to be sprinkled with it daily, till they entirely disappear.

SAPO MERCURIALIS.

A new preparation of mercury has been invented at Petersburgh, called the Mercurial Soap, which is said to be of very great avail in obstinate venereal complaints. A solution of quicksilver in diluted nitrous acid, or aqua fortis, is mixed with a solution of white Spanish soap; whereby an oily substance rises on the surface of it, which forms, with caustic alkali, a soap containing mercury. Two scruples of this remedy are dissolved in two ounces of distilled water, and it is given in drops. Hufeland gave it to eighty drops, in distilled water, twice a day, and with some success.

SAPO TEREBINTHINÆ.

R Kali præparati calidi unc. j Olei terebinthinæ unc. iij.

The kali whilst hot is to be rubbed in a heated glass mortar, and the oil of turpentine gradually added.

This forms Starkey's soap, a remedy to which many virtues have been attributed, and which

formerly had a place in the Pharmacopoeias of London and Edinburgh.

Without bestowing any extravagant encomiums on this remedy, it is undoubtedly a good application to indolent tumours.

SEMICUPIUM CICUTÆ.

The hemlock bath is formed by mingling a dozen handfuls of the fresh leaves of cicuta, or a proportionate quantity of the dried, in as much hot water as will reach up to the patient's waist. As it is material, that the vapour of the bath should be confined, this process is most conveniently performed in one of the shoe-shaped vessels which are sold for the purpose.

We have the testimony of the late Mr. Justamond, and of Dr. Cheston, in behalf of this remedy, when employed in painful affections of the uterus, and even where that viscus has been found, on examination, in an indurated state.

SEVUM AERATUM.

Citizen Fourcroy relates a new method of combining oxygen with suet, to make the oxygenated pomatum. Take any quantity of purified lard, and let it melt by a gentle fire in an earthen vessel; add to it afterwards two thirds of its weight of pure nitric acid 28—30 degrees strong, and stir the mixture with a wooden

spoon, till it be cool; then put the whole into thirty times its weight of rain or river water, and let it boil for half an hour, and stir it continually, till it become cool. After having separated the fat from the water, melt it again, and preserve it in a glass or earthen vessel.

Alyon's method is somewhat different from this; he takes sixteen parts of purified lard, and one part of nitric acid, 32 degrees strong. When the fat is melting, he adds the acid, and stirs it with a glass tube, by which means the azote is destroyed during the boiling, and the oxygen only remains combined with the suet, and he does not put it in water to purify. The fat imbibes in this manner more oxygen, and it is therefore a question which method is preferable. The lard treated after Fourcroy's prescription contains but one-third of its weight of oxygen, and Alyon's almost double the quantity.

The inventors of this remedy have not explained themselves as to the cases in which a composition containing oxygen might be employed; and its properties consequently remain to be ascertained. Possibly it may have some effects, convenient, if not curative, in cancerous or scorbutic ulcers.

Fourcroy remarks, that if the oxygenated pomatum should not prove of any avail as a medicine, it at least may be made use of to subdue quicksilver the sooner, and to prepare the ointment of it in a fifth of the time that is usually required. In Tromsdorf's Journal der Pharmacie, vol. VIII. are contained farther particulars concerning this remedy.

SOLUTIO ARGENTI NITRATI

R Argent nitrati scrup. j
Aquæ distillatæ unc. ss misce.

This solution of nitrated silver, forms a very efficacious application, to that kind of ulcer, whose cure is prevented by a succession of coats of coagulable lymph over its surface. The mode of applying it, is by means of a bit of lint, fixed to the end of a probe. This being dipped into the liquid, is streaked round the extreme edges of the ulcer. In some painful ulcers also, which resist the operation of common remedies, and which rather appear to be aggravated by the use of emollients, it will frequently prove serviceable. The strength of the solution may be augmented or diminished according to circumstances.

In many of the cases first mentioned indeed, the light application of the caustic itself is required.

SOLUTIO ARSENICI.

R Arsenici pulveris subtilissimi Kali præparati sing. gran. xvj Aquæ distillatæ unc. iv.

These are to be digested together in a sandheat, till the arsenic is completely dissolved.

Dr. Fowler, who directs this formula, employs it in the cure of agues, as it appears, with considerable success. In surgical cases, its use will be chiefly, though not entirely, limited to its application as a topic, in cancerous ulcers. The solution being diluted to the proportion of one grain of arsenic to a quart, a poultice is to be made of it with crumb of bread, and applied next the wound. The late Mr. Justamond tried arsenic very extensively in cancerous affections, and, from his description, even its external application is to be managed with great caution. On account of the deleterious effects it has occasionally produced on the system, many practitioners have entirely relinquished it as a medicine.

In administering this solution internally, Dr. Fowler directs a dose of ten or twelve drops, to adults, twice or three times a day; but it may be prudent to begin with a much smaller quan-

tity. The properties of arsenic are those of a very powerful tonic.

SOLUTIO FERRI VITRIOLATI.

R Ferri vitriolati ad albidinem calcinati drach. j Aquæ distillatæ unc. viij misce.

This solution is of great use in hastening the cicatrization of ulcers, where that process is going on but slowly. It is also of service to sore nipples in women who give suck.

For both these purposes, it is strongly recom-

mended by Dr. Underwood.

SOLUTIO HYDRARGYRI CUM PLUMBO.

R Hydrargyri drach. ij Plumbi drach. iss Acidi nitrosi unc. j.

These are to be put into a glass vessel, which must be placed in a sand heat till the solution is effected.

This is the solutio caustica of Plenck, who recommends it as an effectual application for the cure of condylomata in venereal cases.

SOLUTIO HYDRARGYRI MURIATI.

R Hydrargyri muriati gran. x Spiritus vinosi tenuioris lib. j.

The muriated quicksilver is to be rubbed with the spirit, till it is completely dissolved.

This is the mercurial solution of Van Swieten, who directed it, in venereal complaints, in the dose of one ounce twice a day.

At St. Bartholomew's Hospital, an aqua hydrargyri muriati is kept, consisting of eight grains, with two drams of muriated ammonia, dissolved in a pint of water; the dose, half an ounce twice a day. The spirit however is certainly to be preferred, as it in some measure prevents the ill effects which this remedy is apt to produce on the stomach and bowels.

The addition of a small portion of muriated ammonia greatly facilitates the solution of muriated quicksilver.

SOLUTIO MAGNESIÆ VITRIOLATÆ CUM ANTIMONIO.

R. Magnesiæ vitriolatæ unc. iv Antimonii tartarisati gran. ij Aquæ bullientis lib. j misce.

This purgative solution is singularly useful in

the hernia humoralis, and other local inflamma-

From two to four ounces may be given, and repeated according to circumstances.

SOLUTIO NATRI MURIATI.

R Natri muriati drach. j Aquæ distillatæ q. s.

The water is to be added in such a quantity as barely to dissolve the whole of the salt.

This solution is of service in complaints of the ear, particularly those which arise from hardened wax, which it has a tendency to soften; so that the ear may be afterwards cleansed, by syringing warm water into it.

This remedy was first brought into notice by Dr. Haygarth, who-found it a better solvent of the wax, than any thing before used for that purpose.

SOLUTIO SAPONIS.

R Saponis mollis unc. iv Spiritus vinosi tenuioris lib. j

The soap is to be digested with the spirit till it is dissolved.

The addition of one ounce of camphor, forms the solutio saponis camphorata, a preparation

similar to the linimentum suponis compositum of the college.

SOLUTIO ZINCI CUM ALUMINE.

R. Zinci vitriolati drach. iij Aluminis drach. j Aquæ ferventis lib. ss. misce.

This is the vitriolic solution, so strongly recommended by Dr. Moseley in the dysentery, colica pictonum, &c. It is of no less value, as an internal remedy, in many surgical cases; where local affections are continued in consequence of constitutional debility.

A table spoonful generally vomits in an expeditious manner, and leaves the stomach invigorated, rather than weakened, by its action. When vomiting is not intended, it is to be given in the dose of a tea spoonful, or two, twice or thrice a day, and the alum may be omitted, or its proportion varied, in the event of costiveness.

SPIRITUS AMMONIÆ SUCCINA-TUS. (L)

R Alkoholis unc. j
Aquæ ammoniæ puræ unc. iv.
Olei succini rectificati scrup. j
Saponis gran. x.

The soap and oil of amber are to be digested together till both are dissolved, and afterwards the water of pure ammonia is to be added.

This has been strongly recommended for the cure of the bite of the viper. It is doubtful however, whether any known remedy be preferable, in that case, to olive oil, of which so many successful trials have been recorded.

SPIRITUS CAMPHORATUS. (L)

R Camphoræ unc. iv Spiritus vinosi rectificati lib. ij misce

This has been long in use as a remedy for bruises, sprains, and external spasmodic affections. It is a good application to burnt parts, and, by the late Mr. Justamond, said to be useful in checking an incipient whitloe, in which case, it should be applied on linen rag.

SPONGIA PRÆPARATA.

Pieces of the finest and most porous sponge, dipped into melted emplastrum ceræ compositum, and pressed, whilst hot, between two plates of iron, form, what is called *sponge tent*.

When cold, it may be cut into plugs or tents of any shape; and when introduced into small openings with a view of enlarging them, the plaster melts, and the sponge, recovering its natural elasticity, increases in bulk by absorbing

the fluids of the part, so as to produce the desired

It is seldom however, in these days, that this remedy is resorted to; though formerly, it was generally used by surgeons.

SPONGIA USTA. (L)

Burnt sponge, has for some time been employed, in the dose of from one to three scruples, for the cure of scrofula. But as its properties merely depend on the quantity of natron it contains, the latter is now generally preferred.

SUCCUS ACONITI SPISSATUS.

This remedy is prepared exactly in the way directed by the College for the extract of hemlock. It is given at St. Bartholomew's and Guy's Hospitals, in cancerous and scrofulous cases, in progressive doses, beginning with one or two grains three times a day.

SUCCUS CICUTÆ SPISSATUS. (L)

Concerning this remedy, the preparation of which is fully described in the new College Pharmacopoeia, particular mention is made under the head of PILULÆ CICUTÆ.

SUCCUS HYOSCYAMI SPISSATUS.

This also is prepared in the manner directed for cicuta. It has been tried, with various de-

grees of success, in cancer and scrofula; and Mr. Bell, of Edinburgh, speaks of having prescribed it with advantage, in chordees, which have resisted the use of opium. He recommends the dose to be gradually increased from one grain to two, three, or more, three times a day. After the patient has taken it some weeks, the quantity in each dose will admit of being increased to seven or eight grains.

SYRUPUS HYDRARGYRI.

R Hydrargyri purificati drach. j Pulveris arabici gummi drach. iij Syrupi simplicis unc. ij Aquæ fumariæ unc! j.

The quicksilver being rubbed down with the gum and the syrup, the rain water is to be afterwards added.

This is the once celebrated mercurial syrup of Plenck. The dose is from two to three tea spoonfuls night and morning.

There is another, invented by Cit. Bouillon-Lagrange, of which the following account is given in the Medical and Physical Journal.

"This mercurial preparation was first invented by Mr. Belet, and is much recommended by Portal. There are several methods of preparing it; all which, however, afford a very imperfect preparation, on account of the quicksilver separating itself from the mixture, and falling to the bottom of the vessel, when it is kept but a little time. The quicksilver syrup of Bouillon-Lagrange, though it agrees on the whole with that of Belet, is yet preferable, because it is not so easily decomposed, and may stand a long time without producing a precipitation of the quicksilver. It ought never to be taken with any thing warm, as the quicksilver is immediately precipitated in form of a yellowish oxide. The mode of preparation is the following. Prepare solution of pure quicksilver in nitric acid; let the nitrated quicksilver crystallise, and dissolve these crystals once or twice in distilled water, by which means a pure salt is obtained. Make a simple syrup, by dissolving 13 pound of sugar in one pint of distilled water, and clarify and filtrate this liquor. Dissolve 93 grains of the above crystals of nitrate of quicksilver in a sufficient quantity of pure distilled water. The syrup being cold, add to it this solution, and then mix in the whole fluid half a drachm of pure nitrous æther. The syrup that is thus prepared, remains perfectly clear several days."

It is evident that many of the other chymical preparations of quicksilver might be formed into syrups, if there be any peculiar advantage

in exhibiting mercury in that form.

SYRUPUS SARSAPARILLÆ COMPO* SITUS.

R Radicis sarsaparillæ incisæ et contusæ unc. iv.

Ligni guaiaci rasi unc. j Aquæ distillatæ lib. v.

These are to be boiled together in the way in which the decoctum sarsaparillæ compositum is prepared, leaving only a quart of fluid, which is afterwards to be formed into a syrup with a pound and a half of fine loaf sugar.

There is little doubt, but this is the remedy so greatly extolled under the name of Velno's vegetable syrup. That it should have gained reputation as a remedy for the gonorrhœa, is not wonderful, any more than that those anomalous symptoms, which often alternate with lues venerea, or remain after mercury has cured the original disease, should have been relieved by-it. No instance, however, of its having cured a true venereal lues, without the aid of mercury, can be produced.

Some are inclined to think that it contains hydrargyrus muriatus fortior; the peculiar activity of that preparation allowing only so small a proportion, and even that so involved in the sugar and resinous matter of the guaiacum em-

ployed, as not to be discoverable by chymical analysis.

A dose of about two ounces is given twice a day.

TERRA PONDEROSA MURIATA.

A saturated watery solution of muriated barytes, (a salt produced by combining the pure terra ponderosa with muriatic acid) was a few years ago introduced into practice by the late Dr. Adair Crawford, who tried it very extensively in St. Thomas's Hospital, and found it, as he expressed himself, "peculiarly calculated to correct the scrofulous diathesis."

Mr. Juch proposes the following new method of preparing the muriated barytes, or terra ponderosa salita, which seems worthy of attention.

"Take one part of finely pulverized barytes or heavy spar; after having burned it, and quenched it in water, add two parts and a half of pot-ash. This mixture is melted, and kept on the fire for an hour and a half, in an earthen vessel, of which those fabricated in Hessi are particularly famous among the German chymists. When the whole mass is entirely fluid, pour it into a clean iron kettle, and boil it well with common water for the sake of clearing it from the sulpate of pot-ash or vitriolated tartar. The barytes obtained in this manner is still mixed

with some undissolved spar. Saturate it now perfectly with muriatic acid, and let it evaporate. The remaining dry mass of salt is melted again in an earthen vessel; and being in a quiet state of fluidity, pour it upon a stone plate; and cover it with a vessel, to prevent any thing escaping, which sometimes happens in cooling. To give this mass a fine, regular crystalization, and to separate it from other heterogeneous matters, it must be dissolved in a sufficient quantity of distilled boiling water. It is not necessary to pulverize it before, because a greater part remains undissolved, when pulverized, than when the whole is put into the vessel. In this solution, volatile liver of sulphur, dissolved in water, is dropped as long as any precipitation is visible; by which means it is cleared from any adherent metallic particles. The fluid is now filtered, and gently evaporated to the point of crystalization."

Great nicety is certainly required in the preparation of this medicine, and its exhibition must be regulated with the utmost caution. Four or five drops, in distilled water, twice a day, is a sufficient dose in the beginning; but it may, in some cases, be gradually increased to fifteen drops or more. Should any nausea however, or vertigo, be occasioned, this quantity cannot be safely augmented.*

TINCTURA BENZOES COMPO-SITA. (L)

Renzoes unc. iij
Styracis colati unc. ij
Balsami tolutani unc. j
Aloes succotrinæ unc. ss
Spiritus vinosi rectificati lib. ii.

We are directed to digest these in a gentle heat for three days, and to strain off the tincture.

The application of this remedy has been grossly mistaken in its general use as a styptic to fresh wounds, which it certainly injures, not only by its stimulating qualities, but also by the separation of the resins which takes place on its intermixture with the blood. These form a substance, which absolutely prevents, what is most desirable in such a case, the sides of the wound coming into contact and uniting by the first intention.

Its proper application is to languid ulcers; and in this view, it is in general use at several

^{*} Dr. Crawford's account of this remedy, may be seen in Vol. II. of Medical Communications. A solution, prepared with great exactness, agreeably to Dr. Crawford's receipt, is sold at Willis's, at the Hermitage.

of the hospitals, particularly at St. Bartholomew's. Another very important use of it, is to form a mechanical covering to the aperture made in the skin by the protrusion of the bone in some compound fractures. In these, the object is to prevent the admission of air, so as to give nature a chance of uniting the bone in the way of a simple fracture. To effect this very eligible mode of cure requires some nicety in the application of the tincture, which is commonly used on pledgits of lint, laid one over the other, so as to cover the orifice, and extend to some distance around it. It is of great consequence, in making this attempt, to prevent the tincture from flowing into the wound; for which reason, it would perhaps be most advisable to cover that with a little goldbeater's skin, before the tincture is more profusely employed.

TINCTURA CANTHARIDIS.

R Cantharidum contusarum drach. ij Spiritus vinosi tenuioris lib. j

This differs from the College formula only in the omission of the cochineal, which is a useless ingredient. The cantharides are to be digested for eight days in the spirit, which is afterwards to be strained.

This tincture is given internally for gleets,

and for incontinence of urine arising from a defective action of the sphincter vesicæ, which it frequently restores by its stimulus. The usual dose is from ten to forty or sixty drops twice or thrice a day; but its effects should be attentively watched.

Externally, its principal use is in the cure of sinuses and fistulous openings, when it is employed as an injection, in the proportion of three or four drams to a pint of water; its good effects, in these cases, depending on its being sufficiently strong to excite inflammation. This is the remedy which once gained celebrity in the cure of fistulæ in ano, under the name of Matthews's Injection.

TINCTURA FERRI MURIATI. (L)

R Ferri rubiginis lib. ss Acidi muriatici (pondere) lib. iij Spiritus vinosi rectificati lib. iij.

The rust of iron is to be mixed with the muriatic acid in a glass vessel; in which state, being occasionally shaken, they are to remain for three days. The clear part is then to be evaporated to one pint, and when cold, the spirit is to be added.

Internally, this is sometimes given for gleets, but a more important use has been assigned it by Mr. Cline, who orders it in dysuria, when a consequence of *stricture*, in the dose of ten drops every twenty or thirty minutes. This relaxes the spasm through which the retention is occasioned, by a mode of operation not easily explained.

Mr. Justamond's liquid for external use in cancers, and which the original inventor called his panacea anticancrosa, partook considerably of the nature of this tincture, which, indeed, with an equal quantity of spirit of wine, was sometimes substituted for it.

Lastly, it is remarkably efficacious in destroying venereal or other warts, either used alone, or diluted with a small proportion of water.

TINCTURA GAMBOGIÆ AMMO-NIATA.

R Gambogiæ gran. xxxvj Spiritus ammoniæ unc. iv.

The gum is to be powdered and added to the spiritus ammoniæ.

A tea spoonful or two of this tincture, taken every night and morning, is of considerable service in cutaneous diseases.

TINCTURA MYRRHÆ. (L)

R Myrrhæ contusæ unc. iij Spiritus vinosi tenuioris lib. iss Spiritus vinosi rectificati lib. ss.

These are to be digested, in a gentle heat, for eight days, and the tincture strained.

This medicine is not so much in use as formerly. It is occasionally employed however in detergent gargles, and as an application to ulcers that require stimulating. By joining to these ingredients, an ounce of hepatic aloes, we make the old *Compound Tincture of Myrrh*, which, though now in disuse, is no despicable application to old ulcers.

TINCTURA OPII. (L)

R Opii purificati in pulverem triti drach. x Spiritus vinosi tenuioris lib. j.

These are to be digested for ten days, and the tincture strained off. The uses of it are so generally known as to require no description.

TROCHISCI SPONGIÆ USTÆ.

R Spongiæ ustæ drach. ss Mucilaginis arabici gummi q. s. Fiat trochiscus. In the cure of the bronchocele, the internal use of burnt sponge, has, for some time, been considered as a most efficient remedy. It has been joined, by different practitioners, with many other ingredients, and administered in a variety of shapes.

Dr. Cheston has found it to succeed in a great number of cases, when employed agreeably to the above formula, and subject to the following regulations, which certainly appear to be an improvement on the methods recommended in the Coventry receipt, which we shall presently insert.

When the tumour appears about the age of puberty, and before its structure has been too morbidly deranged, a pill, consisting of a grain or two of calomel, must be given for three successive nights, and, on the fourth morning, a saline purge. Every night afterwards, for three weeks, one of the troches should, when the patient is in bed, be put under the tongue, suffered to dissolve gradually, and the solution swallowed.

The disgust at first arising from this remedy, soon wears off. The pills and purge are to be repeated at the end of three weeks, and the troches had recourse to as before; and this plan is to be pursued till the tumour is entirely got the better of.

The receipt given by Mr. Wilmer as the means used by Dr. Bate of Coventry for the cure of his daughter, and which afterwards grew into so much celebrity, is much more elaborate.

A bolus, including ten grains of calcined sponge, and the like quantity of calcined cork and burnt pumice stone, was ordered to be administered thus—

"The day after the moon hath been at the "full, the patient is to take a vomit, and on the " succeeding day, a purge. On the third night, " going to bed, the above bolus is to be placed " under the tongue, and, being allowed to dis-" solve gradually, is to be swallowed. This is to " be repeated for seven nights, and in the fore-"noon of each day, a powder is to be given, " consisting of flowers of chamomile, gentian " root, and seeds of the lesser centaury, each in " powder, five grains. On the eighth day, the " purge is to be repeated; and in the wane of " the succeeding moon the same process is to be " commenced, and repeated a third time, unless " the disease is cured before. The vomit is only " to precede the first course of medicine.

In another recipe, the bolus consisted simply of the calcined sponge, in the dose directed in the troche first mentioned; but the directions with regard to the bitter powders, &c. were the same in every respect.

The bronchocele has, most undoubtedly, been cured in a number of instances by the exhibition of burnt sponge. In common with other scrofulous affections, it is not difficult to suppose, that the stimulus given to the intestines by an occasional dose of calomel as a purge, is of service; but, it is a question, whether the periodical discipline held forth in the Coventry remedy, is not of too empirical a description; and whether the weak habits in which scrofula usually exists, may not be injured by so free a use of evacuants.

Mr. Prosser, in his account and method of cure of the Bronchocele, published in 1771, recommends the following remedy.

R. Hydrargyri sulphurati rubri Millepedum in pulverem tritorum Spongiæ ustæ sing. gran. xv. misce.

This powder he directs to be taken an hour or two before breakfast for a fortnight or three weeks. The patient is then to abstain from medicine for a fortnight, at the end of which she is to have recourse to the powders as before, and also to be put under a course of the pilula mercurialis of the late London Pharmacopoeia.

One or more of these were given at night according to the age and strength of the patient, and according to their immediate effects on the bowels.

By the use of these remedies, he states, that the tumour generally disappeared in a month or six weeks; especially if the patients were young and the disease recent. The millepedes in the powder, however, may no doubt be omitted, not only as being inert, but adding greatly to the bulk of the medicine, and somewhat to its disgusting taste. It may likewise be worth considering, with regard to the pill, whether quicksilver so administered as to hazard its specific effect, ought to be given in any scrofulous affection whatever.

It has been thought an unnecessary formality to apply the troche of burnt sponge under the tongue, and that the passing it immediately into the stomach must answer every good purpose, but Dr. Johnstone of Worcester, in his account of a defect of deglutition from a straitning of the esophagus, contends for the rationality of the practice, upon a supposition that the remedy is absorbed by the vessels that communicate immediately with the diseased part. By placing under her tongue every night, a troche, consisting of a scruple of burnt sponge and the like quantity of ferrum ammoniacale, a lady of

a scrofulous habit was cured by Dr. Johnstone of an obstruction in the œsophagus: the disease recurring several times, but always yielding in the course of a few weeks to this remedy.

VINUM ANTIMONII COMPOSITUM.

R. Vini antimonii unc. ss

Tincturæ opii drach. ij

Liquoris hydrargyri muriati gutt. viij

misce.

From fifteen to twenty or thirty of these drops, given in a quarter of a pint of milk twice a day, prove a very powerful remedy in cutaneous diseases.

Their effects are promoted considerably, by giving the sarsaparilla or elm-bark decoctions at the same time.

VINUM ANTIMONII OPIATUM.

R. Vini antimonii drach. vj Tincturæ opii drach. ij misce.

This is the anodyne sudorific of Mr. Bromfield, who brought it into use in the treatment of injuries of the brain, in which cases it is known to possess extraordinary powers. The dose he directs, is ten drops every four or six hours.

It may not be amiss to remark here, that the

narcotic qualities of opium are greatly, if not wholly repressed, by its junction with the antimony: insomuch, that the effect of a considerable dose is rather that of assuaging pain, than procuring sleep.

VINUM OPII.

R. Opii purificati unc. ij
 Cinnamomi
 Caryophyllorum sing. drach. j
 Vini albi lib. j.

These, macerated without heat for a week, and then filtered, form the *tinctura thebaica* of the old Dispensatory.

It is preserved here, chiefly on account of its use in the treatment of ophthalmia, in which it is said, by Mr. Ware, to possess qualities superior to any other solution of opium.

In chronic inflammation of the eye, a drop or two may be insinuated between the eye-lids, every night and morning.

VITRUM PRÆPARATUM.

The use of this in surgery, is wholly confined to the treatment of opacities of the transparent cornea of the eye.

The glass must be rubbed down to an impalpable powder, in a mortar of agate, or some other substance that will resist the mechanical action of its particles. This, and indeed all similar powders, are applied most conveniently, when mixed with a small portion of honey or mucilage.

UNGUENTUM ACIDI VITRIOLICI.

R Acidi vitriolici drach. ss Adipis suillæ præparatæ unc. j.

These are to be well mixed together in a glass mortar.

Dr. Duncan of Edinburgh is said to have employed this remedy for the itch, in preference to sulphur; and it may possibly prove serviceable in other cutaneous affections.

A liniment consiting of vitriolic acid and oil, was formerly used, with great reputation, as a remedy for the gout, by Colbatch, and latterly at Bristol, by Mr. Smith. It has at least proved exceedingly serviceable, in reducing enlargements of the joints, those especially that have proceeded from a thickened state of the cellular membrane. In the treatment of anomalous tumours, it is also worthy of a trial; but it is liable to fret the skin, and the part to which it is applied should be covered with flannel instead of linen, on account of the destructive effects of the acid on vegetable substances.

Mr. Nayler, of Glocester, employs this lini-

ment, with the addition of a good proportion of camphor, in the cure of the bronchocele.

UNGUENTUM CALCIS HYDRAR-GYRI ALBÆ. (L)

R. Calcis hydrargyri albæ drach. j Adipis suillæ præparatæ unc. iss misce.

This ointment will commonly cure the itch, and is of service in other cutaneous complaints.

UNGUENTUM CERÆ. (L)

R. Ceræ albæ unc. iv Spermatis ceti unc. iij Olei olivæ lib. j.

These, after being melted together, are to be briskly stirred till quite cold. This ointment forms a convenient simple dressing for superficial wounds.

UNGUENTUM CERÆ COMPOSITUM.

R Unguenti ceræ unc. j Styracis colati drach. j.

The wax ointment is to be melted and the storax added, after which it is to be kept for two hours by the fire in a fluid state, and occasionally stirred. During the process a beautiful red may

be communicated to it by the addition of a little alkanet root.

This is a good application to the lips when chapped or excoriated.

UNGUENTUM CERÆ CUM ACETO.

R. Ceræ albæ unc. iv Olei olivæ lib. j Aceti distillati unc. ij.

After melting the two former ingredients together, the distilled vinegar is to be gradually stirred in, as in making the *nutritum*, than which, this proves a much more neat and an equally efficacious remedy. Dr. Cheston, of Glocester, directs it for superficial excoriations, cutaneous eruptions, &c.

.UNGUENTUM CERÆ CUM HYDRAR-GYRO.

R Ceræ flavæ unc. viij
Adipis suillæ præparatæ unc. iv
Olei olivæ unc. ij
Unguenti hydrargyri unc. vj.

The wax, lard, and oil, are to be melted together and stirred till they are a good deal cooled, when the quicksilver ointment is to be thoroughly mixed with them. This is a good deal similar to the ceratum mercuriale, which the College have very injudiciously expunged. It is an exceeding good application to languid ulcers, and possesses the farther advantage, of acting favourably on their callous edges. For this reason, when applied, it should be extended to some distance round the sore.

UNGUENTUM CICUTÆ.

R Foliorum cicutæ recentium Adipis suillæ præparatæ sing. unc. iv.

The cicuta is to be bruised in a marble mortar, after which, the lard is to be added, and the two ingredients thoroughly incorporated by beating. They are then to be gently melted over the fire, and after being strained through a cloth, and the fibrous part of the hemlock well pressed, the ointment is to be stirred till quite cold. To cancerous or scrofulous sores, this ointment may be applied with a prospect of advantage.

At St. Bartholomew's Hospital, four pounds of the recent plant are boiled with six of lard, till the former is become *crisp*, after which the ointment is strained through a cloth. It is to be suspected however, that the medicinal properties of the cicuta are injured by this process.

UNGUENTUM DIGITALIS.

R Foliorum digitalis purpureæ recentium

Adipis suillæ præparatæ sing. unc. iv.

This ointment is prepared after the same manner, and applied to the same uses, as the unguentum cicutæ.

Cit. Van Mons prepares ointments and plasters in which fresh plants or their juices are used as ingredients, in a different way. He carefully expresses the juice, and reduces it to a thin extract by the most approved processes. He then places it over the fire with the requisite oleaginous ingredients, and stirs it continually till what may remain of the water is dissipated, and the whole forms an homogeneous substance fit for use.

UNGUENTUM ELEMI COMPOSITUM.

R Elemi lib. j
Terebinthinæ unc. x
Sevi ovilli præparati lib. ij
Olei olivæ unc. ij.

The elemi is to be melted with the suet, and when removed from the fire, the turpentine and oil are to be stirred in.

This, though an old remedy, is perhaps the best of the terebinthinate applications in use, for the purpose of encouraging a good digestion from ulcers. It may be employed alone, or softened with a little oil of turpentine.

UNGUENTUM ELEMI CUM ÆRUGINE.

R. Æruginis præparatæ drach. j Unguenti elemi compositi lib. ss.

The verdigris being mixed with a little oil, is to be gradually stirred into the elemi ointment, melted. At St. George's Hospital, the unguentum resinæ flavæ is, for this purpose, preferred to unguentum elemi. This remedy has been long in use as a stimulant to foul ulcers.

UNGUENTUM GALLÆ ĈAMPHORA-TUM.

R Gallarum pulveris subtilissimi drach. ij Camphoræ drach. ss Adipis suillæ præparatæ unc. j.

The camphor being first incorporated with the lard, the powdered galls are to be added. This ointment is a very useful application for the piles, especially if the use of leeches has been premised.

UNGUENTUM HELLEBORI ALBI.

R Hellebori albi pulveris unc. j Adipis suillæ præparatæ unc. iv misce.

This is the same as the hellebore ointment of the College, the omission of a small quantity of the essence of lemon excepted. It is a useful application for the itch and other eruptions.

Dr. Saunders, in his Formulæ selectæ, directs equal parts of this and sulphur ointment, as a re-

medy for the itch.

UNGUENTUM HYDRARGYRI.

No. I.

R Hydrargyri purificati lib. ij Adipis suillæ præparatæ unc. xxiij Sevi ovilli præparati unc. j.

The quicksilver is to be extinguished by triture with the suet, and the lard afterwards added. This is the unguentum hydrargyri fortius of the London College.

No. II.

R Hydrargyri purificati lib. j Adipis suillæ preparatæ lib. ss.

The quicksilver is to be rubbed, as in the for-

mer case, with a small portion of the lard, adding the rest gradually, till the whole is uniformly blended. The proportions of this ointment differ from those of the College, which many surgeons think too weak; and their injunctions have also been disregarded with respect to the introduction of suet, which makes it of too hard a consistence (at least in the winter season) to be conveniently rubbed into the skin.

The chemical phenomena which arise from the union of quicksilver with fatty substances, attracted the notice of the celebrated Fourcroy, who, in vol. ii. of his "Elements of Chemistry," says,-" In this ointment, the particles of the mercury do not merely seem to be distributed and interspersed among the particles of the fat, without any adherence or chemical union; on the contrary, the oily matter of mercurial ointment very quickly becomes rancid; and we know that rancidity, or incipient acidification, is always the consequence of the combination of oil with some other substance (now known to be oxygen, which it seems disposed to absorb more quickly by being united with a metallic substance). When the ointment is old, if we rub a portion of it between two bits of paper, the whole of the oil is absorbed, without leaving any globules of mercury visible behind it : but when we treat mercurial ointment, recently prepared,

in the same manner, we can very readily perceive a great number of metallic particles quite distinct. M. Beaumé took equal quantities of mercurial ointment; one of which was newly made, and the other become slightly rancid by keeping. He kept both of them in a state of liquefaction during eight days, in a degree of heat much below what could possibly decompose the fat. The newly-made ointment allowed three drachms of mercury to separate; the other, which was rancid, only one drachm and a half. All these observations do not allow us to doubt of the reality of the combination; they pointedly prove, that what we call the extinction of mercury in fat, is not purely the effect of mechanical division, since those two substances exert a slow spontaneous action upon one another, from which a more intimate union at length results. This is much confirmed, by observing the difference in colour and consistence between old and new ointment. New made ointment is of a very light colour, and extremely soft: while what has been kept for some time is much darker in colour, and much firmer in consistence: a sufficient proof of some change in the intimacy of their union. We are in the next place to enquire in what state the mercury unites with the fat, whether in form of a metal, or in form of a calx (oxyd).

226

"When old mercurial ointment is converted into a saponaceous compound by the addition of caustic alkali, there is always a quantity of fluid mercury separated from the mixture, the fat forsaking the mercury to unite with the alkali. Mercurial ointment is also decomposed by the action of ether upon it. When a small quantity of good mercurial ointment is put into a flask, which is two thirds full of ether and distilled water, and the mixture frequently shaken, the mercury soon begins to precipitate, carrying a small portion of fat along with it, which gives the mercury the appearance of a calx; but this fat soon disappears, and the mercury unites in the form of metallic globules, by simply drying it upon bibulous paper. By this analysis, we collect almost the whole of the mercury in a fluid state. In reviewing all these facts carefully, it seems probable, that the mode in which mercury combines with fat, more resembles the amalgamation of the metals with mercury, than their dissolution in acids, as the mercury is taken up in a metallic state, and not calcined (oxydated); the fatty matter serving the purpose of a solvent to the mercury, in the preparation of mercurial ointment, in the same way that mercury itself serves the purpose of a solvent to the other metals, in the combination of the different amalgams."

Mr. Proctor, jun. in the Medical and Physical Journal, offers some remarks upon Fourcroy's conclusion on this subject. He considers the quicksilver to be simply mechanically divided by triture in pure sweet fat; " for (says he), upon rubbing the mixture upon the surface of any body which will either absorb the fat, or allow it space to be diffused upon, the mercury presently re-unites into small globules, as in its original state; and this happens from the connection between it and the dividing matter (fat) being destroyed. But when the ointment has been kept some time, no such effect takes place, because the union becomes more intimate in consequence of the fat undergoing a change, by which it really does dissolve part, and in time, the whole of the mercury; and this change is no other than a gradual acidification, which it seems more readily to undergo from its combination. with the mercury, by the absorption of oxygen from the atmosphere. The smell, which would betray its rancidity, or acidification, cannot be perceived till all the mercury is combined with the sebacic acid, when the superabundant quantity of fat, having no metal to neutralize, or rather to saturate its acid, will of course become sensible to the smell."

As a proof of this, Mr. Proctor adduces the practice (common with some apothecaries)

of procuring a more speedy extinction of the quicksilver, by rubbing it, in the first instance, with a little old mercurial ointment, which, being rancid, will readily take even a considerable addition of fresh mercury. Indeed, he found, upon trial, that a small portion of rancid fat extinguished a large one of quicksilver, without communicating a disagreeable smell to the ointment.

The general uses of quicksilver ointment need not be enumerated; but it may be worth while to observe, that Mr. Clutterbuck, a late writer on the means of remedying paralytic affections arising from lead, found it of considerable use to rub the usual dose of this ointment, every night, into the paralyzed limb; accompanying these frictions with the internal use of calomel, till the mouth became sore. Whilst the calomel relieves the constipated state of the intestines, the mercurial inunctions tend to restore the lost powers of the part; and in many instances, it appears, this treatment has proved decisively advantageous.

UNGUENTÚM HYDRARGYRI CAM-PHORATUM.

R. Unguenti hydrargyri unc. j Camphoræ drach. ss misce.

A little of this, rubbed along the course of the urethra, at bed-time, is of considerable service in preventing or removing chordee. This ointment is also very proper to be applied to indurated parts, either before or after suppuration.

UNGUENTUM HYDRARGYŔI MU-RIATI.

R Hydrargyri muriati subtilissime lævigati gran. x Ovi unius vitellum Adipis suillæ præparatæ unc. j.

The muriated quicksilver, being first rubbed with the yolk of egg, is to be incorporated with the lard.

These make a very neat ointment, which is applicable in the same cases as the unguentum hydrargyri nitrati.

UNGUENTUM HYDRARGYRI NI-TRATI.

R Hydrargyri purificati unc. j

Acidi nitrosi unc. ij,

Adipis suillæ præparatæ unc. iv

Olei olivæ unc. xij.

The quicksilver, being reduced to a calx by the addition of the nitrous acid, is to be joined with the oil and lard, previously melted together and suffered to become nearly cold.

This formula differs from that of the College, in substituting lard and oil for lard alone, which makes it much too hard for any use but that of promading the edges of the eyelids in ophthalmia, for which indeed it is peculiarly well calculated, and strongly recommended (with the occasional use also of the vinum opii) by Mr. Ware. Its use in diseases of the eye is confined to those instances, where, from long continued inflammation, the vessels of the tunica conjunctiva are not only "dilated," but become "relaxed and torpid;" the eye being weak and irritable when exposed to a strong light, but without signs either of general plethora or active inflammation.

This ointment is also of very extensive utility in eruptive and herpetic diseases; in tinea, and in some cases of ulcer. It may be very safely applied to the whole surface of the body, if in any case necessary.

UNGUENTUM HYDRARGYRI NI-TRATI RUBRI.

R Ceræ albæ drach. ij Adipis suillæ præparatæ drach. vj Hydrargyri nitrati rubri drach. j. The wax and lard, being melted together and suffered to grow nearly cold, are to be well incorporated with the red nitrated quicksilver, previously levigated.

This, allowing for the omission of twelve grains of opium and the substitution of lard for viper's fat, is the unguentum ad lippitudinem of St. Thomas's Hospital. The use of it is to excite healthy granulations in obstinate ulcers, and as an application in chronic inflammation of the eyelids. For the latter purpose it is also rubbed on the upper eye-lids by Mr. Ware.

UNGUENTUM LITHARGYRI ACETATI.

R Unguenti ceræ unc. j

Aquæ lithargyri acetati drach. ss misce.

This is a convenient substitute for the unguentum cerussæ acetatæ of the College, which becomes rancid and unfit for use in a short time after it is made.

It is a proper application to small ulcers whose edges are in a state of inflammation.

UNGUENTUM LITHARGYRI COMPO-SITUM.

R Emplastri lithargyri lib. ss Adipis suillæ præparatæ unc. iv, Olei olivæ Unguenti ceræ sing. unc. vj Aceti unc. iv Aquæ lithargyri acetati unc. ij.

The unctuous ingredients being melted together and suffered to cool, the water of acetated litharge and the vinegar are to be gradually incorporated with them.

This ointment is said to be the celebrated defensative of Dr. Kirkland, who applies it with great effect in inflammations of the skin, and sometimes unites with it a portion of vitriolated natron.

UNGUENTUM LITHARGYRI CUM ACETO.

R Emplastri lithargyri unc. iv Olei olivæ unc. iij Aceti unc. j.

The litharge plaster and oil being melted together and sufficiently cooled, the vinegar is to be stirred in. This has been long in use, under the title of nutritum, as an application to the skin, and as an external dressing for ulcers whose edges are inflamed.

UNGUENTUM OPHTHALMICUM. No. I.

R Hydrargyri nitrati rubri
Lapidis calaminaris præparati sing.
drach. iss
Lithargyri lævigati drach. j
Tutiæ præparatæ drach. ss
Hydrargyri sulphurati rubri scrup. j
Balsami Peruviani gutt. xv
Adipis suillæ præparatæ unc. ij.

The powders being well rubbed together and mixed with the lard, the balsam of Peru is lastly to be added.

This elaborate remedy, which is given us by Mr. Bell of Edinburgh, is used for diseases of the eyelids, and also for the removal of opaque specks upon the cornea, for which purposes it has been successfully employed by its inventor M. Pellier.

No. II.

Re Calcis hydrargyri albæ
Tutiæ præparatæ
Lapidis calaminaris præparatæ sing.
drach. ij
Tincturæ benzoes compositæ drach. j
Adipis suillæ præparatæ drach. iij.

The white calx of quicksilver, tutty, and calamine, being rubbed separately and afterwards well mixed together, the lard is next to be joined, and lastly the tincture of benzoes.

This is the celebrated ointment of Dr. De Gravers, and is used with great success in the same cases as the foregoing. At the Liverpool Infirmary, it is used under the name of unguentum detersioum.

UNGUENTUM PICIS ARIDÆ.

R Picis aridæ unc. ix Ceræ flavæ unc. ivss Olei olivæ lib. ss.

These, when melted together, form a similar ointment to the black basilicon, which has been very unworthily expunged from their last Pharmacopoeia by the College.

Dr. Kirkland and several other surgeons of eminence employ it in their practice, and consider it a beneficial application to those ulcers, in which there exists an extraordinary degree of irritability.

It may not be improper to mention here, that Dr. Kirkland distinguishes the irritability of ulcers into two kinds, the inflammatory, and the spasmodic. The existence of the former is evinced by the highly florid colour of the part: the latter may be distinguished by its languid, purple, and glassy appearance. Both are considerably painful and sore; but the latter, when ever so slightly touched, is remarkable for throwing the muscles of the limb into action.

In ulcers of the latter description, this ointment will be found of service, whilst those compositions into which turpentine enters, are wholly inadmissible. In the same kind of ulcer, Dr. Kirkland also employed the balsam of Peru on lint, with considerable good effect.

UNGUENTUM PICIS CUM SULPHURE.

P. Picis liquidæ lib. ss Ceræ flavæ unc. ss Florum sulphuris unc. ij.

The wax and the tar being melted together, the sulphur is to be gradually stirred in.

This, which is one of the formulæ of Guy's Hospital, is an excellent application for the cure of tinea. It is necessary, during its use, for the patient to have his head repeatedly shaved, and to wear a close-fitted cap of the green oil-case, which, independent of the remedy applied, will be of very considerable service, and indeed is capable of effecting a cure, in slight cases, without the use of any other means.

UNGUENTUM RESINÆ FLAVÆ. (L)

Resinæ flavæ Ceræ flavæ Olei olivæ sing. lib. j.

Having melted together the wax and resin, the oil is to be added.

This is the composition long known as a digestive, under the name of yellow basilicon.

UNGUENTUM RESINÆ COMPOSI-TUM.

Resinæ flavæ
Elemi
Ceræ flavæ sing. unc. j
Olei olivæ unc. vj
Olei terebinthinæ drach. ij.

The hard ingredients being melted together, the olive oil is to be added, and, when the whole is a good deal cooled, the oil of turpentine.

This is the ointment said to be employed by Dr. Kirkland, under the name of green digestive; with the exception only of the green oil which gave it its name and colour, and for which olive oil is substituted.

UNGUENTUM SULPHURIS.

R Adipis suillæ præparatæ lib. ss Florum sulphuris unc. iv misce.

The intention of this ointment, is to cure the itch, which it does more certainly perhaps than any other remedy; but its offensive smell occasions it to be used by most people, with very great unwillingness. A single inunction is in general sufficient for the cure, provided the patient wears his linen, without changing, for several days.

UNGUENTUM TUTIÆ.

R Tutiæ præparatæ drach. j Adipis suillæ præparatæ q. s.

As much of the lard is to be added as will form the tutty into an unguent, the sole use of which, is to smear the borders of the eyelids when affected with chronic inflammation.

The College order tutty mixed with ointment of spermaceti.

UNGUENTUM ZINCI.

R Zinci usti drach. j Unguenti ceræ albæ drach. vj misce.

238 PHARMACOPOEIA, &c.

This is the Edinburgh ointment of zinc. Its use is that of an application to the eyelids. At St. Thomas's Hospital a similar remedy is employed, under the name of unguentum oph-thalmicum.

UVA URSI.

This plant, which was first brought into notice by De Haen, has been generally considered as a powerful remedy in calculus; but it has not been proved, in any instance, to possess the properties of a solvent. The late Dr. Austin however, recommended it upon the principle of its lessening the irritability of the bladder, and diminishing that secretion of diseased mucus, which he supposed greatly to contribute to the augmentation of the stone.

Mr. Bell of Edinburgh, strongly recommends it in that state of a gonorrhoea where the irritability of the bladder is excited in a high degree, and where the urine is loaded with viscid matter. In these cases, he directs the powder to be given in doses of a scruple or half a dram three times a day. A remedy of this sort is certainly a great desideratum in surgery.

Dr. Saunders directs three drams of uva ursi to be macerated in a pint of hot water, and two or three ounces of the strained liquor to be given three times a day.

TABLE OF FORMULÆ.

ACETUM.

Aсетим Cataplasma aceti Mezereum acetatum Unguentum ceræ cum aceto

ACIDUM MURIATI-CUM.

Gargarisma acidi muriatici Injectio acidi muriatici

ALCOHOL.
Alcohol caryophyllatum

Injectio aluminis
Lotio aluminis
Pulvis aluminis compositus

AMMONIA.

Collyrium ammoniæ acetatæ	
Embrocatio ammoniæ	
Emplastrum ammoniæ	
Fomentum ammoniæ muriatæ	
Haustus ammoniæ acetatæ	
Injectio ammoniæ acetatæ	
Linimentum ammoñiæ	
cum	
camphora	
fortius	
opia-	
tum	
bituminis am-	
moniatum	
camphoræ am-	
moniatum	
Lotio ammoniæ acetatæ	
muriatæ	
cum	
aceto	
opiata	
Pilulæ ferri ammoniacalis	
Spiritus ammoniæ succinatus	

Tinctura gambogiæ ammoniata

ANTIMONIUM.

Antimonium muriatum Arsenicum antimoniatum Electuarium antimonii Pulvis antimonialis Solutio magnesiæ vitriolatæ cum antimonio Vinum antimonii composi-

---- opiatum

ARGENTUM.

Argentum nitratum Pilulæ argenti nitrati Solutio argenti nitrati

ARSENICUM.

Aqua arsenicata Arsenicum antimoniatum tartarisatum Solutio arsenici

CALAMINARIS.

Ceratum lapidis calaminaris Pulvis lapidis calaminaris cum myrrha

CALX.

Calx cum kali puro

Cataplasma calcis - vitriolatæ

CAMPHORA.

Collyrium ammoniæ acetatæ camphoratum - cupri vitriolati camphoratum lithargyri acetati

camphoratum Embrocatio ammoniæ acetatæ camphorata

- cantharidis cum camphora

Emplastrum resinæ cum camphora

Linimentum camphoræ æthereum

moniatum positum

sapone

Oleum palmæ camphoratum Spiritus camphoratus

Unguentum gallæ camphoratum

CANTHARIS.

Ceratum cantharidis Embrocatio cantharidis cum camphora

Emplastrum cantharidis Pilulæ cantharidis Tinctura cantharidis

CARBO.

Cataplasma carbonis

effervescens
Electuarium carbonis

CERA.

Emplastrum ceræ compositum

Unguentum ceræ

CICUTA.

Cataplasma cicutæ

Emplastrum ammoniaci cum
cicuta

Fomentum cicutæ

Pilulæ cicutæ

Semicupiume cutæ

Succus cicutæ spissatus Unguentum cicutæ

CINCHONA.

Cinchona Electuarium cinchonæ cum natro

COPAIBA.

Mistura copaibæ cum olibano Injectio copaibæ

CUPRUM.

Ærugo
Ærugo cum calomelane
Aqua cupri vitriolati camphorata
Collyrium cupri ammonisti

vitriolati camphoratum

Gargarisma æruginis
Injectio cupri acetati
ammoniat
vitriolati

com

posita
Linimentum oleosum cum
cupro

Liquor cupri ammoniati
Oxymel æruginis
Pilulæ cupri vitriolati
Unguentum elemi cum ærugine

EUPHORBIUM.

Emplastrum euphorbii
—————————— ex euphorbio

FERRUM.

Lixivium martis Pilulæ ferri ammoniacalis Solutio ferri vitriolati Tinctura ferri muriati

442 INDUE OF	GRINOLIZE.
GALBANUM.	Injectio calomelanos
Cataplasma galbani composi-	hydrargyri
tum	muriati
HELLEBORUS.	Liquor hydrargyri muriati
Decoctum hellebori albi	Lotio hydrargyri muriati
- · j	Pilulæ calomelanos
HYDRARGYRUS.	compo-
Calomelas	sitæ
Ceratum calomelanos	cum an-
hydrargyri hydrargyri	timonio
nitrati	hydrargyri
lapidis calaminaris	acetati
cum hydrargyro	calcinati
Collyrium hydrargyri com-	cum ci-
positum	cuta
muriati	præcipi
Emplastrum ammoniaci cum	tati cinerei
hydrargyro	vitriolati
Gargarisma hydrargyri mu-	Pulvis hydrargyri vitriolati
riati	compositus
Hydrargyrus acetatus	Sapo mercurialis
calcinatus	Solutio hydrargyri cum
cum creta	plumbo
muriatus	muriati
fortior	Syrupus hydrargyri
mitis	Unguentum calcis hydrargyr
nitratus ruber	albi .
præcipitatus ci-	ceræ cum hy-
nereus	drargyro
sulphuratus ru-	——— hydrargyri
ber	cam-
vitriolatus .	phoratum

Unguentum hydrargyri muri-- nitrati - nitrati rubri KALI. Aqua kali - puri Calx cum kali puro Cataplasma kali acetati Kali aeratum --- arsenicatum --- purum Lotio kali sulphurati MEL. Ceratum mellis - cum terebinthina Mel boracis - hydrargyri ---- compositum

MYRRHA.

Gargarisma myrrhæ Lotio myrrhæ Mistura myrrhæ composita Pulvis cinchonæ cum myrrha Tinctura myrrhæ

NATRON. Cataplasma natri vitriolati Electuarium cinchonæ cum natro Natron præparatum Solutio natri muriati Spongia usta Trochisi spongiæ ustæ

OPIUM.

Cataplasma papaveris albi Causticum opiatum Collyrium ammoniæ acetatæ opiatum opiatum Emplastrum opiatum Enema opiatum - olei cum opio Fomentum papaveris albi Injectio opiata Opium purificatum Pilulæ opii camphoratæ ---- compositæ Tinctura opii Vinum antimonii opiatum --- opii

OXIGEN.

Sevum aeratum

PIX.

Emplastrum picis compositum Lotio picis liquidæ

11	CICITO ETE.
Unguentum picis aridæ	Linimentum lithargyri com-
cum sul-	positum
phure	Lotio lithargyri acetati
	cam-
PLUMBUM.	phorata
Aqua lithargyri acetati	Unguentum lithargyri acetati
Cataplasma lithargyri acetati	com-
Ceratum lithargyri	positum
acetati	cum
compositum	aceto
Cerussa acetata	
Collyrium cerussæ	SAPO.
lithargyri acetati	Ceratum saponis
cam-	Embrocatio ammoniæ acetatæ
phoratum	cum sapone
Cremor lithargyri acetati	Emplastrum saponis
Emplastrum cerussæ	Linimentum camphoræ cum
lithargyri	sapone
Bur-	cerussæ cum sa-
gundicum	pone
com-	
positum -	Sapo mercurialis
cum	terebinthinæ
hydrargyro	Solutio saponis
cum	
resina	SARSAPARILLA.
Para-	Decoctum sarsaparillæ
celsi	com-
Injectio cerussæ composita	- positum
lithargyri acetati	Syrupus sarsaparillæ compo-
Linimentum cerussæ cum sa-	situs
pone	January in

SINAPIS. Cataplasma sinapeos Linimentum sinapi

TEREBINTHINA.
Ceratum mellis cum terebin-

resinæ flavæ
Electuarium terebinthinæ
Enema terebinthinæ
Linimentum terebinthinæ

compositum

Oleum terebinthinæ

terebinthinatum

Pilulæ terebinthinæ cum
rhabarbaro

Unguentum resinæ flavæ

positum

ZINCUM.

Collyrium florum zinci

zinci vitriolati

phoratum
Injectio zinci vitriolati
Linimentum zinci vitriolati
Lotio zinci vitriolati
Pilulæ zinci vitriolati
Unguentum zinci vitriolati

FORMULÆ, &c. For the most part, incapable of the foregoing arrangement. Acidum nitrosum Balsamum Peruvianum cum felle Cataplasma brioniæ compositum cerevisiæ cumini dauci farinaceum farinæ compositum lini ____ mali maturi oxalis quercus marini radicis solani tuberosi --- rosæ ---- sinapeos Causticum anti-cancrosum Ceratum cretæ acetatæ compositum

---- rubrum

Cerei medicati

- simplices

Decoctum astragali

salis cornu cervi

spermatis ceti

TABLE OF FORMULÆ.

246

	- 15 - 1
Decoctum bardanæ	Infusum foliorum lauri ce-
dulcamaræ	rassi .
hordei cum gum-	lini
mi	piperis cayensis
lobeliæ .	Injectio gallæ
lusitanicum	oleosa
mezerei	- theæ
quercus	- vini rubri
sanonariæ	Linimentum oleosum
ulmi	com-
Electricitas.	positum
Electuarium olibani	sepiæ composi-
sennæ compo-	tum
situm	succini opiatum
Emplastrum brioniz compo-	tutiæ
situm	Lotio spirituosa
cumini	Moxa
ladani composi-	Mucilago arabici gummi
tum	seminis cydonii
scillæ composi-	mali
tum	Oleum e seminibus lini
Enema nicotianæ	ricini
oleosum	Pasta piperis composita
Fomentum florum chamæ-	Pulvis colombæ
meli *	ipecacuanhæ compo-
	situs
gallæ	nitri compositus
pyrethri	
rosæ	rhabarbari
Glacies	composi-
Infusum foliorum belladon-	tus
næ	sabinæ compositus

Spongia præparata
Succus aconiti spissatus
hyoscyami spissatus
Terra ponderosa muriata
Tinctura benzoes composita
Vitrum præparatum
Unguentum acidi vitriolici

Unguentum	digitalis (
	elemi composi
tum	
	ophthalmicum
	sulphuris
	tutiæ
Uva ursi	

TABLE OF REMEDIES.

A BSCESS.—Fom et catapl. varia—Ol. palmæ camph.
—Galx cum kali puro—Kali purum.

ALBUGO.—Vitrom præp.—Calomelas—Lin. sepiæ—Collyr. Cupr. ammon.—Collyr. hydr. cum Calce.

ANI PROCIDENTIA.—Foment. gallæ—Inj. gallæ—Inj. Aluminis.

APHTHÆ.—Mel boracis—Garg. myrrhæ—Garg. aluminis—Mist. myrrhæ.—Linim. acidum.

BRAIN, INJURIES OF.—Vin. antim. opiat.—Haust. amin. acetat.

BREAST, MILK.—Lot. ammon. muriat.—Crem. lither. acet.—Lot. ammon. acet.—Fom. et catapl. varia.—Ol. palm. camph.

BRONCHOCELE.—Troch. spong. ust.—Pil. Calom. +
Pil. hydrarg.—Natr. præp.—Emp. Hydrarg.—Emp.
Ammon.—Emp. Ammoniaci cum hydrarg.—Linim. oleos. comp.

BRUISES — Cataplas, aceti — Embroc. ammon. acet. cum.

BULO Polin camph.—Catapl. farinaceum, cerevisiæ, opiatum, &c.—Kali pur. vel calx cum kali puro.—Emp. resin cum camph.

30.2. Acetum—Lin. oleos.—Lot. lithar, acet. camph.
—Glacies.—Linim terebinth.

CANCER — Aq. Arsenica—Arsen. antim.—Fom. et catapl. cicut.—Semicupium cicut.—Catapl. dauci—Caust. anticancr.—Ol. esem. lini—Sol. arsen.—Pil. citut., aconiti. vel hyoscyami—Inf. lauri cerassi—Lot. ammon. opiat.—Pil. ferri ammon.

CARBUNCLE.—Cinchona—Forn. cicutæ—Catapl. efferv.
—Opium—Catap. kali acet.

- CHANCRES.—Arg. nitrat.—Ceratum calom.—Ærugo—
 Ærug. cum calom.—Pulv. alum. comp.—Ceruss. acetat.
 —Ung. hydr. nitr. rub.—Aq. kali.
- CHILBLAINS.—Embr. alum.—Embr. ammon. camph.
 —Lot. alum.—Catap. alum.
- CHORDEE.—Pil. 'opii camph.—Pil. 'opii comp.---Ung. hydr. camph.---Pil. hyoscyami.
- COSTIVENESS.---Elect. carbonis---Ol. ricini---Elect. sennæ comp.
- CUTANEOUS AFFECTIONS,---Decoct. ulmi---Dec. bar-danæ---Dec. sarsap.---Tin. gambog. ammon.---Sol. hydr. mur.---Vin. ant. cum hydr.---Ung. hydr. nitr.---Ung. hydr. muriati.
- DYSURIA,---Dec. hord. cum gummi---Inf. lini---Pulv.
- EAR, DISEASES OF .---Bal. Peruv. cum felle---Ol. terebinthinat.---Sol. natri muriati.
- ERYSIPELAS.---Cinchona---Lot. am. acet.---Lot. spirituosa---Sp. camph.
- EXFOLIATION, TO PROMOTE. --- Alkohol caryophillatum. --- Acetum.
- FISTULA, --- Inject. hydrarg. mur. --- Tinctura cantharidis. ---- Pasta pip. comp. --- Enem. oleosum.
- FRACTURE,---Cerat. saponis---Aq. litharg acet. comp.---Tin. benzoes comp.
- GLEET.--Elect. olibani---Inj. astringent. variæ---Mist. copaibæ---Pil. cupr. vitr. comp.---Pil. terebin.---Pil. zinci vitr.---Sol. zinc. vitr. c. alum.
- GONORRHEA,...Pil. terebinth....Enem. opiat....Inj.
- GUTTA SERENA,---Pulv. hydr. vitr. comp.---Vin. antim. comp.---Emp. canthar.---Electricitas---Inf. pip. cayens.

- GUMS, Spongy.—Garg. alum.—Garg. myrrhæ.--Mist. myr hæ—Garg. rosæ.
- HERNIA HUMORALIS.—Elect, sennæ comp.—Fom. & catap, emol. & sedat.—Lotiones discut.—Crem. lithar. acet.—Hydr. vitriol.—Ung. hydrarg.
- HERNIA, STRANGULATED.—Enem. nicotianæ. Glacies.
- HEMORRHAGE.—Lix. mart.—Sol. cupr. vitr.—Ol. terebin.—Glacies.
- HEMORRHOIDS,—Fom. gallæ—Ung. gallæ camph.—Ol. palm. camph.—Past. pip. comp.—Inj. alum.
- HYDROCELE.—Caust. Opiat.—Inj. vini rub.—Kali pur. INFLAMMATION.—Cataplas farinaceum, lini, lithar. acetati, vel papav. albi—Lotiones variæ.—Pulv. antimonialis.
- ITCH.—Dec. helleb. alb.—Ung. helleb. alb.—Ung. sulph.
 —Ung. acidi vitr.—Ung. hydr. muriati.
- KNEE, DISEASED.—Lotiones & embr. variæ—Catapl. calcis, quercus marini, aluminis, &c.—Emp cerussæ, cantharidis, vel lithar. cum hydr.—Ung. hydr.—Lin. cerussæ cum sap.—Lin. amm. opiat.—Lin. oleos. comp.—Lin. camph. comp.—Lin. ammon.—Lin. am. cum camph.
- LEPRA.—Dec. saponariæ, sarsaparillæ, &c.—Elect. antim.—Hydr. muriat.—Pil, cal. cum antim.—Vin. ant.
 cum hydr.—Tinct. gambog. amm.—Ung. hydr. nitrat.
 —Ung. hydr. muriati.—Sap. mercurialis—Sev. aerat.
- LUES VENEREA.—Hydrargyri præparationes variæ
 —Dec. mezerei, sarsaparillæ, sarsapar. compositum,
 astragali, lobeliæ, lusitanicum, &c.—Hydr. sulph. rubAcid. nitros.
- MORTIFICATION.—Catap. carbonis, cumini, effervescens, vel cerevisiæ—Cinchona—Opium.

- NEPHRITIS.—Natron, prep.—Dec. hord, cum gummis—Vin. antim. opiat.—Enem. terebin.
- OPHTHALMIA Collyria varia—Catapl. aluminis, rosæ, natri vitriolati, mali maturi—Crem lithar. acet.—Vinopii—Aq. cupr. vitr. camph.
- PHYMOSIS.—Fom. & catap. emol.—Inj. cupri vitr.
- PHAGEDÆNA.—Cinchona—Lot. Alumin.—Pulv. Cinchon. cum Myrrha—Solut. ferri vitriol.—Linim. oleos. cum cupro.—Oxymel ærug.—Catapl. efferves.—Catapl. carbonis.
- SCALDS.—Catap. rad. solani tuberosi—Lot. lithar. acet. camph.—Lot. spirituosa.—Linim. terebinth.
- SCROFULA.—Catap. quercus mar.—Lot. hydrarg, mur. comp.—Dec. mezerei, dulcamaræ, lusitanicum, &c.—Elect. cinch. cum natro—Sol. zinci c. alum.—Spong. usta—Pil. cicutæ, aconiti, hyoscyami, &c.—Catap. kali acet.
- SPRAINS,—Catap. aceti—Emb. amm. acet.—Emb. amm. acet. cum sapone—Emb. amm. camph.—Lin. succini opiat —Linim. sinapi.
- SPINE, INCURVATIONS OF—Kall purum—Cinchona—
 /Sol. zinci, vitr. c. alum.—Natron, &c.
- STONE.—Uva ursi—Enem. terebinth.—Aq. kall pur.— Kall aeratum—Natron præp.
- STRICTURE.—Cerei simp, metallici, vel medicati—Argent, nitrat.
- TINEA.—Lot. kali sulph.—Ung. hydr. nitrat.—Ung. hydr. mur.—Ung. picis aridæ—Ung. picis cum sulph.
 —Lot. picis liquid.
- TUMOURS, INDOLENT.—Linim. sinapi—Lot. hydrar. mur. comp.—Catap. brionæ comp.—Emp. varia.
- Emp. scillæ comp.—Emplastr. ammoniæ.









